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MESOPOTAMIAN HISTORY AND ENVIRONMENT

SERIES II

MEMOIRS VI

# MESOPOTAMIAN POTTERY

## A GUIDE TO THE BABYLONIAN TRADITION IN THE SECOND MILLENNIUM B.C.

by

James A. ARMSTRONG and Hermann GASCHE

A JOINT PUBLICATION OF THE UNIVERSITY OF GHENT
AND THE ORIENTAL INSTITUTE OF THE UNIVERSITY OF CHICAGO

2014

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A Joint Publication of the University of Ghent and the Oriental Institute of the University of Chicago
© Recherches et Publications, Neuchâtel

ISBN 978-2-940032-18-1 (CH)
ISBN 978-1-61491-018-3 (USA)

Library of Congress Catalog Card Number : 2014937351

Printed in Belgium
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This volume presents research results of the ‘Interuniversity Pole of Attraction Programme VI/34 – Belgian State, Prime Minister's Office – Federal Office for Scientific, Technical and Cultural Affairs.’

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# ACKNOWLEDGMENTS

We especially want to recognize the strong support of the late Léon De Meyer, Rector of the University of Ghent. Thanks to his efforts this project to study Babylonian pottery of the 2nd millennium was begun within the framework of a larger Belgian project, " The Land of Sumer and Akkad : Reconstruction of its Environment and History ", which was directed initially by Hermann Gasche. We also offer our sincere thanks to McGuire Gibson, director of the Nippur Expedition of the Oriental Institute of the University of Chicago, for his ongoing support and advocacy on our behalf. We also want to thank him for painstakingly reading our manuscript and making many useful suggestions that have contributed to its improvement. Without the energetic backing of these two individuals, this undertaking could never have been brought to completion.

James Armstrong's participation was funded in part by a visiting fellowship at the University of Ghent in 1993 and by annual fellowships awarded by The American Academic Research Institute in Iraq for 2006-07 and 2009-10.

Several individuals provided beneficial support over the years. We gratefully acknowledge Lisa Heidorn and Steven W. Cole for their hospitality in Evanston, Illinois, Marie Boscals de Reals for her hospitality in Paris and Caroline Janssen for her hospitality in Ghent. We also want to thank Joseph A. Greene in Cambridge, Massachusetts for his readiness to provide help to us when it was needed.

Robert Codmard, Paris, devoted much of his time many years ago to create a database for the finds from Tell ed-Dēr, Mari and Susiana. This tool is still extremely efficient and we warmly thank him for his protracted efforts.

We are very appreciative of the interest and support of Michel Tanret of the University of Ghent. Erik Smekens assisted us for many years by producing the first pottery plates with humor, dedication and professionalism, for which we are extremely grateful. We thank Karin Minsaer, Kris Verhoeven and Ann Degraeve for their valuable contributions during the project's early stages. Bea Storme and Nicole Vandenberghe helped organize the drawings of the Tell ed-Dēr pottery, which we acknowledge with gratitude.

We also want to recognize the efforts of Jan De Meester of Cultura, who provided expert technical advice throughout the project, especially regarding the organization and arrangement of the illustrations.

We are grateful for the assistance of our colleagues associated with the Oriental Institute. We express our deep appreciation to Gil Stein, Director, for providing part of the funding for the printing of this book. Besides McGuire Gibson, we acknowledge with gratitude the help of Judith A. Franke and Richard L. Zettler of the Nippur Expedition, who graciously shared with us the results of their own efforts to organize the pottery from Nippur and Umm al-Hafriyat. Their work made our task much easier.

We thank Richard Zettler and Michael Danti for unpublished drawings of vessels from Ur in the University of Pennsylvania Museum of Archaeology and Anthropology.

We gratefully acknowledge the interest in our work shown by Edward Ochsenschlager and the late Donald Hansen, who permitted us to publish vessels excavated by the al-Hiba Expedition of the Metropolitan Museum of Art and New York University.

We express our appreciation to Robert McC. Adams, former Secretary of the Smithsonian Institution, for hosting a meeting of the Working Group on Mesopotamian Pottery in Washington in 1988.

We offer our thanks to Annie Caubet, Béatrice André-Salvini, Agnès Benoit, Françoise Tallon, Nicole Chevalier and Monique Burési for their kind and efficient cooperation during our work with the collections in the Louvre. Béatrice André-Salvini and Agnès Benoit graciously provided photographs of pottery in the Louvre and granted us permission to publish them.

We acknowledge with gratitude the assistance of Jean-Louis Huot and Yves Calvet, who supplied unpublished material from Larsa. We are greatly indebted to Christine Kepinski-Lecomte, who gave us free access to the pottery found at Khirbet ed-Diniye, ancient Harrâdum. We thank Pierre Lombard, who provided us with references for archaeological work in the Gulf and also supplied the drawing of a vessel from Bahrain. Olivier Aurenche and Yves Calvet generously organized a meeting of the Working Group at the *Maison de l'Orient,* Lyon in March, 1994.

We thank Jean-Claude Margueron for his kind permission to publish pottery found at Mari. We also gratefully acknowledge the valuable assistance provided by the late Nina Pons during our work with the material from Mari, Susa and Tchogha Zanbil.

We express our gratitude to our Turin colleagues Antonio Invernizzi, Giovanni Bergamini and Elisabetta Valtz for fruitful meetings in Ghent, Turin and Paris, and for permission to publish pottery excavated at Tell Yelkhi and Tell Kesaran.

We are grateful for the cooperation of the late Barthel Hrouda, who provided us with drawings of the pottery from Isin, and Arnulf Hausleiter and the late Karsten Karstens, who gave us additional information about that pottery. At the University of Munich we thank Kai Kaniuth for helpful advice about the Isin material and Katja Sternitzke for supplying us with drawings of pottery from Babylon. We gratefully acknowledge the permission of the *Vorderasiatisches Museum, Staatliche Museen zu Berlin* to publish the vessels from Babylon.

We very much appreciate all the information supplied by Flemming Højlund, Moesgård, on the pottery found in the Gulf.

We also appreciate the information provided by Peter Miglus and Mark Altaweel about newly discovered material in the Shahrizor Plain in northern Iraq. We wish to thank Marguerite van Ess for answering questions about material in the Uruk/Warka publications.

Many people contributed greatly to make this book possible. The authors, however, are solely responsible for all statements, interpretations and conclusions expressed herein.

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# INTRODUCTION

Our goal has been to develop a comprehensive guide to the ceramics of 2nd-millennium Babylonia based upon well-dug, well-recorded stratigraphic sequences and incorporating material from all parts of Babylonia and its periphery.

The lack of an adequate knowledge of the ceramics and ceramic sequences for ancient Babylonia – indeed for all of Iraq – has long been recognized. This has largely been due to inadequate excavation methods and insufficient attention to the abundant ceramic remains that are routinely found. Earlier efforts to study the ceramics comprehensively, for example, AYOUB (1982), have been limited by the inadequacy of the underlying stratigraphic and chronological control and the general lack of evidence from potsherds. As a result, the use of ceramics for dating purposes in historical Babylonia has remained especially difficult.

In succeeding years the situation changed for the better with advances in excavation and recording techniques, and in the 1980s a critical mass of well-excavated material had become available. Recognizing this, H. Gasche and other excavators began organizing a cooperative project among European and North American expeditions to examine all aspects of Babylonian pottery and, in particular, to produce a comprehensive guide of 2nd-millennium Babylonian pottery that was anchored by well-excavated and well-dated stratigraphic sequences. This cooperative venture goes by the name "The Working Group on Mesopotamian Pottery." Gasche and J.A. Armstrong took on the task of producing this guide to 2nd-millennium Babylonian ceramics.

## EARLIER EFFORTS BY THE WORKING GROUP IN RELATION TO THE PRESENT STUDY

From its inception one of the goals of the Working Group was to approach the study of pottery from a number of different directions. This variety of approaches is reflected in the publications associated with the Group.

Walther SALLABERGER (1996) published, « Der babylonische Töpfer und seine Gefässe nach Urkunden altsumerischer und altbabylonischer Zeit sowie lexikalischen und literarischen Zeugnissen », together with an updated version of HAR-ra = *hubullu:* Tablet X dug = *karpatu* by Miguel CIVIL (1996). In this volume, Sallaberger presents and discusses the textual evidence pertaining to Babylonian potters and pottery in the late 3rd and early 2nd millennia (Middle Chronology). As a part of this work he links the Old Babylonian names of various kinds of pots with excavated examples of Old Babylonian pottery from Tell ed-Dēr. In the present study we have referred to the vessels he has illustrated either in the plate legends (in the case of vessels also published by us) or in the *Comparanda* (where we have not published vessels illustrated by him) of the pertinent pottery groups.

The concern of the present authors to date correctly the pottery we were working with led us into the vexatious issue of early 2nd-millennium chronology. Together with S.W. Cole, who treated the textual sources, and V.G. Gurzadyan, who dealt with the astronomy, we produced *Dating the Fall of Babylon : A Reappraisal of Second-Millennium Chronology* (*MHEM* 4) in 1998. We found that the very pottery we had been studying provided critical data in support of our contention that the traditional Middle Chronology yields dates for the Old Babylonian and earlier periods that are approximately a century too high. In the present volume, we use the chronology introduced in *MHEM* 4 for the first half of the 2nd millennium ; we refer to it as the New Low Chronology and use the abbreviation NLC where confusion is likely to arise. This chronology is 96 years lower than the Middle Chronology for the so-called Isin-Larsa and Old Babylonian Periods and 93 or 92 years lower for the Ur III Period.[1] One consequence is that the Ur III Period falls largely in the 2nd millennium, and we have included Ur III, that is, 20th-century NLC, vessels in our study. In the following chapter S.W. Cole reviews the chronological debate that has ensued since 1998.

Mention should also be made here of several articles published by Working Group members A. VAN AS and L. JACOBS (1985, 1987, 1988). These articles, together with those co-written by their colleague and mentor H.J. Franken (FRANKEN and KALSBEEK 1984, FRANKEN and VAN AS 1994), are foundational for the technological approach to the study of Babylonian pottery. The efforts of Van As and Jacobs in the area of Mesopotamian ceramics culminate in their contribution to the present volume, « The Babylonian Potter : Environment, Clay and Techniques ». There they discuss the limitations and possibilities inherent in the clays of Babylonia for the manufacture of pottery. They also have analyzed and described the techniques used by ancient potters to produce the major vessel-groups in the Babylonian corpus and have reproduced those techniques experimentally.

## THE MATERIALS USED IN THIS STUDY

The effort to produce a pottery guide for 2nd-millennium Babylonia arose because by the late 1980s there was sufficient coverage, both geographically and chronologically, to make the undertaking feasible. A number of 2nd-millennium sites or levels had been excavated in recent years across Babylonia, particularly at Tell ed-Dēr (Sippar-Amnānum), Tell ed-Deylam (Dilbat), Nippur, Isin, Larsa and al-Hiba (Lagaš). Around the Babylonian periphery there had also been several important excavations in salvage projects along the Euphrates (Haditha Project) and Diyala (Hamrin Project) Rivers. As a result of these salvage efforts, we now had large 2nd-millennium exposures at sites like Khirbet ed-Diniye (Harrâdum), Tell Yelkhi and Tell Zubeidi.

Most importantly, we had cooperation and support from the excavators of ten recently excavated sites. Unpublished pottery drawings and other excavation records were generously provided to us, so that the study we present here is as comprehensive as possible.

The excavations represented are located in different regions within Babylonia, as well as around its periphery. The material that forms the core of this study was excavated at sites in

[1] GASCHE *et al.* 1998a and 1998b place the Fall of Ur in 1911 BC instead of 2004 (or possibly 2003), as proposed by BRINKMAN (1977, 336 and n. 3). Thus the dates used here for the Ur III Period at the outset of the second millennium are, in fact, 93 (or possibly 92) years shorter than those of Brinkman.

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the *Northern Alluvial Plain*[2] : Tell ed-Dēr (Sippar-Amnānum) and Tell ed-Deylam (Dilbat),

the *Southern Alluvial Plain*[3] : Nippur, Umm al-Hafriyat, Isin, Larsa and al-Hiba (Lagaš),

the *Middle Euphrates* : Khirbet ed-Diniye (Harrâdum), and

the *Diyala Basin* : Tell Yelkhi and Tell Kesaran.

The pottery recently excavated at the sites enumerated above provides the overwhelming majority of the data for this undertaking.

We have also cautiously included some material found in earlier publications from several of these same sites, including Nippur and Larsa, especially when they provided whole profiles that were otherwise lacking in our core data set. We have also utilized published ceramics from a number of other sites. Of these, Uruk in the Southern Alluvial Plain and the Diyala Basin (Hamrin) sites of Tell Zubeidi and Tell Imlihiye deserve particular mention, because they provide valuable ceramic evidence for the 2nd millennium.

The peripheral region of *Susiana* is represented by the pottery from R. Ghirshman's *Chantier* A at Susa. This is an older dig, carried out with earlier excavation methods and collection procedures, but its evidence for the 2nd millennium has not yet been superseded in its region. The pottery of 2nd-millennium Susa was published by GASCHE (1973). We have included the Susa material – with suitable caution – because it provides valuable evidence, particularly for the middle of the millennium, when there is a gap in the material from Babylonian sites.

One peripheral region, the *Gulf*, is represented here almost exclusively by previously published ceramics.

We have also been able to include drawings of vessels in museum collections, usually from early excavations, where stratigraphic control was not up to contemporary standards. We have deployed these ceramics with what we hope is sufficient care, for they have provided valuable and much-needed geographic information about the extent of specific groups, which was otherwise unavailable. The drawings of these and other vessels sometimes bear the abbreviation C.P.U., meaning that their chronological position is uncertain.

Mention also needs to made here of the inclusion of vessels from ancient pits and burials in our work. We have used such vessels when their archaeological contexts can be closely defined in stratigraphic terms. In particular, strenuous effort was made at Tell ed-Dēr and Nippur to identify the stratigraphic positions of pits and burials, and we are confident that the pottery used here from such contexts provides reliable information. Vessels from pits and burials are so identified in the Remarks column of the plate legends, where the context from which the pit or burial was dug is also given.

None of the sites used in this study provides an unbroken sequence for the entire 2nd millennium. Of the sites within Babylonia, Tell ed-Dēr and Nippur do have relatively long, though not unbroken, stratigraphic sequences for the period under study. Moreover, the excavators at both sites have paid significant attention to the stratigraphic analysis of the recovered ceramic materials. Finally, these are the stratigraphic and ceramic sequences with which we are personally most familiar. For these reasons we have used Tell ed-Dēr in northern Babylonia and Nippur in southern Babylonia to provide the greatest part of the chronological backbone of our work.

The sequence at Tell ed-Dēr begins in the Ur III Period, which was exposed in a limited area and produced only a small quantity of relevant materials. The sequence continues until Ammiṣaduqa, year 18 (1533 BC). After a break the record picks up again in the Early Kassite Period, not at its beginning but slightly after 1450 BC, and continues into the 13th century.

The 2nd-millennium sequence at Nippur, which is located 140 km southeast of Tell ed-Dēr at the northern end of the Southern Alluvial Plain, also begins with the Ur III Period, although earlier material is present at Nippur as well. It then continues until about Samsuiluna, year 30 (1623). In other words, evidence of the Old Babylonian Period at Nippur ends approximately 90 years earlier than at Tell ed-Dēr.

As has been pointed out in earlier studies,[4] no cities in southern Babylonia can be shown to have survived the reign of Samsuiluna as urban centers. There were two crises during Samsuiluna's reign. With the first, around Samsuiluna's 10th-12th year (± 1642) came the deurbanization of the cities like Uruk, Larsa and Ur in the far South. Based primarily on the evidence of dated tablets, the more northerly cities of Nippur and Isin were also affected by this first crisis, but survived. However, some 20 years later, in Samsuiluna, year 30, both these cities succumbed in the second crisis and ceased to function as significant urban centers.

The archaeological evidence at Nippur picks up again early in the Kassite Period, around 1400. Thereafter it continues into the latter half of the 13th century.[5]

It can be seen that neither of our two backbone sequences provides evidence from the very end of the Old Babylonian Period and the very beginning of the Kassite Period. At Tell ed-Dēr the gap is about a century, from 1533 to slightly after 1450. At Nippur it appears to be more than twice as long, from 1623 to around 1400. No other site within Babylonia proper has yet provided the ceramics needed to fill the unaccounted-for years. Some relevant material has apparently been excavated at Tell Muhammad, a large mound south of Tell Harmal in southeastern Baghdad, east of the Tigris River, which was a significant cultural boundary in the middle of the 2nd millennium.[6] Regrettably the pottery has not been sufficiently published and cannot be worked with effectively. Thus, at the present time only the peripheral site of Susa in southwestern Iran has provided useful ceramic evidence to fill this gap at mid-millennium. The pertinent Susa material is included in this study.

There is a second large gap at both Tell ed-Dēr and Nippur beginning before the end of the 13th century and continuing through the remaining two centuries of the 2nd millennium (and beyond into the 1st millennium). The lacuna is partially filled by finds from Isin, Babylon and Larsa, as well as from the peripheral sites of Tell Zubeidi, Tell Imlihiye and Tell Kesaran in the Hamrin Valley of the Diyala Basin. Even with the addition of materials from these sites, our knowledge of the 11th century, in particular, is still virtually non-existent. We do not again have well-stratified and well-recorded archaeological evidence from Babylonia until the latter half of the 8th century.

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2 The Northern Alluvial Plain corresponds to northern Babylonia. It extends from where the Euphrates and Tigris enter the alluvial plain upstream of Baghdad southeastward to a line crossing the plain between Kish and Dilbat (Tell ed-Deylam) to the north and Nippur to the south. Among the cities of the Northern Alluvial Plain are Dūr-Kurigalzu ('Aqar Qūf), Sippar (Abu Habbah), Sippar-Amnānum (Tell ed-Dēr; see CHARPIN 1988 and 1992 for the different ancient names of Abu Habbah and Tell ed-Dēr during approximately the first half of the 2nd millennium BC), Babylon, Kish and Dilbat (Tell ed-Deylam).

3 The Southern Alluvial Plain, which corresponds to southern Babylonia, extends from the line north of Nippur described above in fn. 2 southeastward to the Gulf. The cities of the Southern Alluvial Plain include, but are not limited to, Nippur, Isin, Uruk, Larsa, Ur, Girsu (Telloh) and Lagaš (al-Hiba).

4 STONE 1977 and GASCHE 1989.

5 A single Isin II form from Nippur has been positively identified (Pl. 90 : 12 [Group 195 B 4]), but no datable post-13th-century ceramic assemblage has been excavated there.

6 GASCHE 1989, 119 and *MHEM* 4, 83.

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# CHRONOLOGY REVISITED[7]

by
Steven W. Cole

The publication of *MHEM* 4 precipitated a flood of commentary that has continued unabated to the present day. The bulk of this commentary has focused on reinterpretations of the documentary data, much of it based on acceptance of the dendrochronological analysis of Old Assyrian materials which would place the reign of Šamšī-Adad I between ca. 1840 and 1775 BC (close to the Middle Chronology).[8] These proposals however ignore the archaeological and ceramic evidence which Gasche and Armstrong set forth in *MHEM* 4. We regard this neglect as a fundamental deficiency in the arguments that have been made for the Middle Chronology and its slightly lower alternatives, and of course for all alternatives higher than the Middle Chronology.

Before we turn to a summary and critique of the principal alternative proposals, it would be helpful first to review the important bodies of textual evidence that have been used in recent reconstructions of 2nd-millennium Mesopotamian chronology, highlighting the various uncertainties that are inherent in their use.

The most important documentary source is the Assyrian King List tradition (hereafter AKL),[9] which survives in three principal manuscripts – the Nassouhi, Khorsabad, and SDAS King Lists[10] – the former of which ends with the reign of Tiglath-pileser II (966-935 BC) and the latter two of which end with kings of the 8th century BC : Aššur-nīrārī V (754-745 BC) and Shalmaneser V (726-722 BC), respectively.[11]

The AKL, although a fundamental source, is an imperfect body of evidence, with missing, uncertain, and questionable regnal data from the end of the reign of Šamšī-Adad I down into the 12th century BC. We do not know, for example, the degree of overlap between the reigns of Šamšī-Adad I and his son Išme-Dagan I.[12] In addition, the year-eponymies connected with the Šamšī-Adad's conquest of Ekallātum and Assur recorded in the AKL are missing from the Kültepe Eponym List (KEL) ;[13] the various AKL manuscripts display numerous discrepancies in reign lengths ; the reign lengths for kings 65-66 are completely missing ; and half of the genealogical attributions for kings 48-71 are probably erroneous.[14] Given these issues, one cannot be certain if the AKL aggregates the reigns of a single sequence of kings or presents two parallel lines as a single line. The linear structure of the AKL may well mask an underlying reality of occasional competing dynasties and overlapping reigns.[15] Also, we do not know the real purpose behind the composition of the AKL,[16] except perhaps to reassure an ancient audience that there had been an unbroken line of succession from the earliest times to the current king.[17]

The existence of such uncertainties in extant manuscripts of the AKL means that one cannot simply add up regnal periods starting from, say, the reign of Aššur-nīrārī V (754-745 BC – the end point of the Khorsabad King List manuscript) to determine

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7 The author wishes to thank Klaas Veenhof and Yigal Bloch, who kindly provided unpublished papers and notes but have not thereby endorsed the author's stance on 2nd-millennium BC chronology. The author also wishes to thank Regine Pruzsinszky, whose collection and summary of the evidence in her 2009 monograph made this work easier than it otherwise would have been.

8 MANNING, KROMER, KUNIHOLM and NEWTON 2001, 2535 n. 26 ; see the discussion in PRUZSINSZKY 2009, 127-128.

9 On which see BRINKMAN 1973, 310 and PRUZSINSZKY 2009, 48.

10 Five texts are regarded as embodying a canonical Assyrian King List tradition : AsKL =VAT 11554 (published as *KAV* 15) ; KhKL = Khorsabad King List ; NaKL = Nassouhi King List ; NiKL = king list fragment from Nineveh (BM 128009, published by MILLARD, *Iraq* 32 [1970] 174-176) ; SDAS = Seventh Day Adventist Seminary King List (see BRINKMAN 1973, 306 n. 1 ; also PRUZSINSZKY 2009, 45). Two additional king list texts – VAT 12058 (published as *KAV* 18) and VAT 9812 (published as *KAV* 14) – are not regarded as belonging to the same tradition (PRUZSINSZKY 2009, 45).

11 The reigns of these kings belong to a continuous block of reigns covering the period 910-722 BC that can be verified by the reign lengths cited in the AKL and checked against continuous lists of Assyrian yearly eponyms (BLOCH 2010b, 21-22). To this block we can add another continuous block covering the period 1114-911 BC for which reign lengths are consistent across AKL manuscripts but which cannot yet be verified by eponym data, apart from the eponym periods of three kings in the 11th century and one king in the 10th (*MHEM* 4, 47-48). This entire sequence can be anchored in absolute time by the mention, in the later Assyrian eponym chronicle, of a solar eclipse in the eponymy of Bur-Sagalê (reign of Aššur-dān III) that can be dated exactly to 15 June 763 BC (*MHEM* 4, 5).

12 The canonical AKL assigns a 40-year reign to Išme-Dagan I, but this figure may include his years as vice-king of Ekallātum under his father. If Išme-Dagan lost his throne when Hammurabi conquered Ekallātum, he would have reigned independently for only ca. 15 years (VEENHOF 2008, 30 and n. 61). On this question, see PRUZSINSZKY 2009, 56-57.

13 According to BARJAMOVIC, HERTEL and LARSEN (2012, 25-26) this suggests that the tradition behind the AKL is corrupt.

14 See BRINKMAN 1973, 311-313 for some of the more obvious discrepancies for the entries from Bēlu-bāni (no. 42) on. Of the genealogical attributions he states : "Because of the relatively high number of variations, the genealogical tradition of the Assyrian Kinglist is quite faulty. This conclusion is bolstered by Landsberger's analysis of generations for kings 48-71, which shows that half the genealogical attributions of this section of the Assyrian Kinglist are likely to be erroneous" (BRINKMAN 1973, 313 ; compare LANDSBERGER 1954, 42-44). BAKER (2010) appears to have answered the question of the meaning of *ṭuppi* (= 1 year), a term which is used to describe the reign lengths of a number kings in the AKL.

15 One of the non-canonical king-list manuscripts, *KAV* 14 (= VAT 9812) preserves a short sequence of kings from the dynasty of Šamšī-Adad I not found in the canonical AKL and greatly telescopes the period between Išme-Dagan I and Šū(Kidin)-Ninu'a (= nos. 40 and 54 in the canonical AKL ; compare *inter alia* READE 2001, 5-6 ; SASSMANNSHAUSEN 2006, 164-165 ; PRUZSINSZKY 2009, 53-54, 56-57). VEENHOF (2008, 31 n. 66) characterizes *KAV* 14 as "the deviating, perhaps older version of AKL" and observes that it has only two lines with four (possibly six) names available for the successors of Išme-Dagan I, before moving to Šū(Kidin)-Ninu'a (no. 54) of the canonical version. The chronological implications of this deviating sequence may be critical. Note also that the only royal building inscription from Assur during this obscure period is attributed to one Puzur-Sîn (GRAYSON 1987, 77-78), who is not named in any king-list manuscript, either canonical or non-canonical. On a fascinating but speculative suggestion to identify this Puzur-Sîn with IB.TAR-Sîn (no. 51) of the canonical AKL, see READE 2001, 6-7.

16 It is interesting that the SDAS tablet, according to its colophon, belonged to one Bēl-šūma-iddin, an exorcist (*mašmaššu*) of Assur (BRINKMAN 1973, 316). The amuletic shape of the Khorsabad and SDAS texts is also curious (see the photos in GELB 1954, Pls. XIV-XVII). According to BRINKMAN (1973, 316 n. 57) : "Oppenheim has pointed out privately the similarity in the distinctive shape of KhKL/SDAS and the ruled-off inscriptional sections of some *līmu* steles found at Assur (*WVDOG* 24 nos. 15, 28, etc.) and has suggested that certain copies of the Assyrian Kinglist may have been intended for funerary or ceremonial purposes (rather than for strictly chronological ends)." REINER (1960, 155) suggested that the AKL texts with this shape were used as house amulets (see PRUZSINSZKY 2009, 46).

17 See the remarks of RÖLLIG (1969) 276 and PRUZSINSZKY 2009, 49.

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the dates of Šamšī-Adad I, which are critical to establishing the chronology of 2nd-millennium BC Mesopotamia because of a well-known, critical synchronism between Šamšī-Adad and Hammurabi, king of Babylon.[18] Establishing exact dates for Šamšī-Adad would then make it possible to anchor the ±516-year unbroken Babylonian sequence from the beginning of Ur III to the fall of Babylon.[19]

Eponyms are helpful in verifying reign lengths cited in the AKL but one must keep in mind that large gaps presently exist in our knowledge of the 2nd-millennium eponym sequence from the end of the reign of Šamšī-Adad I to the accession of Adad-nīrārī II (911-891 BC).[20] Recent investigations of Middle Assyrian texts from Assur and Tell Šēḫ Ḥamad have led to considerable progress in the reconstruction of the MA sequence, especially for the 13th century BC.[21] The discovery at Kültepe of numerous exemplars of an Old Assyrian eponym list (KEL) and the painstaking work of scholars afterwards to reconstruct it,[22] along with similar work done on the Mari Eponym Chronicle (MEC),[23] have resulted in a more-or-less complete 197-year[24] sequence of eponyms stretching from the reign of Šamšī-Adad I back through the reign of Ērišum I.[25] Uncertainties remain in the reconstruction of the OA sequence,[26] but these appear to be minor. It must be stressed, however, that from approximately three decades after the death of Šamšī-Adad I until the accession of Aššur-nīrārī II in the late fifteen century BC, no eponyms and only two dozen short building inscriptions and labels[27] are known. The paucity of documentary evidence from this long period – more than three centuries if one reckons by the Middle Chronology – contrasts sharply with the preceding and succeeding eras.

Because of such gaps and uncertainties in both the AKL and the eponym sequences, scholars interested in 2nd-millennium chronology have turned for help to the time-spans between contemporary and earlier temple rebuildings recorded in the inscriptions of Tukultī-Ninurta I, Shalmaneser I, Tiglath-pileser I, and Esarhaddon, because the inscriptions of these kings cite the precise number of years intervening between their respective reconstructions of the main temples in Assur and the work done by previous rulers, going back to the Old Assyrian rulers Šamšī-Adad I, Ērišum I, and Ilušūma.[28] However, the results at which one arrives when using these *Distanzangaben* in chronological reconstructions depend on the assumptions one makes at the outset. The numerous studies of *Distanzangaben* that have appeared since 1998 demonstrate the wide range of dates which are achievable by reasonable people.[29]

Another related point of uncertainty concerns the calendar system that was used in Assyria between the period corresponding to *kārum* Kaneš level II, when a luni-solar calendar was used, and the reign of Tiglath-pileser I (1114-1076 BC), when the Babylonian calendar with intercalation was introduced. In 1998 we posited that a lunar calendar without intercalation may have been in use in Assyria during this time.[30] The question is important for chronology because the lunar year is shorter than the solar year by ca. 11 days (amounting to approximately three years per century). Yigal Bloch has recently published a formidable argument for the use of a lunar calendar *without intercalation* in Assyria in the 13th-12th centuries BC.[31] Bloch has demonstrated that both the sequence of Middle Assyrian months and the stages of flax processing – which can be tied to specific seasons – moved throughout the solar year.[32] He also presented critical evidence refuting the existence of the intercalation mechanisms proposed by Koch[33] and Weidner.[34] Unfortunately, because very few Assyrian documents are known for the long period between Šamšī-Adad I and Erība-Adad I in the early 14th century, the date of the transition from the luni-solar Old Assyrian calendar of *kārum* Kaneš level II to the purely lunar Middle Assyrian calendar of the 13th-12th centuries BC will remain unclear until such texts appear.[35]

Several studies have appeared since 1998 that have attempted to bridge the mid-2nd-millennium gap, at least in part, based on texts that mention or purport to mention early Kassite rulers.[36] The principal texts that have been used in these reconstructions are Babylonian King List A, Babylonian King List B, the

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18 Šamšī-Adad I is known to have died in Hammurabi year 17 or 18 ; see PRUZSINSZKY 2009, 40 and nn. 107-108.

19 *MHEM* 4, 49.

20 For the eponyms from the reign of Adad-nīrārī II to 648 BC, see MILLARD 1994.

21 FREYDANK (1991) attempted a reconstruction of the entire MA sequence based on some 300 known eponyms from the period between Aššur-nīrārī II (no. 68) and Aššur-bēl-kala (no. 89). More recently, due to the work of FREYDANK (2005), RÖLLIG (2004, 2008), and BLOCH (2008, 2010a) the eponym sequences for the reigns of Shalmaneser I and Tukultī-Ninurta I are reasonably well known. BLOCH (2010b) has also done significant work on reconstructing the eponyms belonging to the period from the death of Tukultī-Ninurta I to the death of Ninurta-apil-Ekur, as well as the order of the eponyms during the reign of Ninurta-tukulti-Assur. It should be noted, however, that important gaps remain for the 12th century BC (see PRUZSKINSZKY 2009, 164). Also, the eponym list *KAV* 21-22, which concerns reigns from Tiglath-Pileser I (1114-1076 BC) to Aššur-dān II (934-912 BC) is in very fragmentary condition (BLOCH 2008, 144 n. 5).

22 Especially VEENHOF (2003, 2007), GÜNBATTI (2008), and BARJAMOVIC, HERTEL and LARSEN (2012).

23 The extant fragments of the MEC were edited by BIROT (1985). VEENHOF is preparing a new edition (personal communication).

24 BARJAMOVIC, HERTEL and LARSEN 2012, 27.

25 The MEC overlaps with the KEL. Together they provide a continuous sequence of eponyms covering 255 years from the beginning of Ērišum's reign (KEL A) to the death of Šamšī-Adad I (KEL G) and beyond (BARJAMOVIC, HERTEL and LARSEN 2012, 3). KEL G continues for some 60 years beyond Šamšī-Adad's death (PRUZSINSZKY 2009, 154).

26 The uncertainties arise from the existence of discrepancies in the KEL manuscripts involving a small number of eponyms, as well as the breaks in manuscript KEL G, which raise questions about the number of eponyms to be placed in the lacunae (BARJAMOVIC, HERTEL and LARSEN 2012, 3-4).

27 See GRAYSON 1987, 77-98, and PEDERSÉN 1985, 29, 89-90 (M9). Significant numbers of texts began to appear only during the reigns of Erība-Adad I and Aššur-uballiṭ I in the 14th century (according to SAPORETTI 1979, 29-55). See also PRUZSINSZKY 2009, 53.

28 For a review of the literature on *Distanzangaben*, see PRUZSINSZKY 2009, 133-146. The time span from Tukultī-Ninurta I's rebuilding of the temple of Ištar Aššurītu to Ilušūma's initial building of this same temple is less important to chronological reconstructions because Ilušūma's reign cannot be securely dated. This ruler is situated in the AKL immediately before Ērišum I but in one of its most questionable sections, and the only other possible chronological indicator is a possible synchronism with Sumu-abum of Babylon attested in the Chronicle of Early Kings (*Su-a-bu*, line 37) which the evidence of KEL now renders an impossibility by almost any scheme of chronological reckoning (see VEENHOF 2008, 31 n. 67).

29 Compare, for example, EDER 2004 ; PRUZSINSZKY 2006a, 2006c ; SASSMANNSHAUSEN 2006 ; JANSSEN 2006, 2009, 2011 and 2012 ; and READE 2001.

30 *MHEM* 4, 50.

31 BLOCH 2012.

32 The phenomenon of Assyrian months moving through the solar year has been known since at least the 1920s (BLOCH 2012, 21). The phenomenon of seasonal agricultural activities moving through the solar year is based on BLOCH's convincing analysis of DeZ 3320, a Middle Assyrian letter from Tell Šēḫ Ḥamad (BLOCH 2012, 27-30).

33 KOCH (1989), 132-141. Concerning Koch's proposed mechanism, BLOCH (2012, 23 and 25) asserts: "… there is absolutely no evidence that Middle Assyrian months were associated with the heliacal rising of specific groups of stars" …. "double-date formulae in Assyrian documents from the reign of Tiglath-pileser I indicate that the Assyrian calendar months moved all the way through the Babylonian year. This suggests that the Assyrian months also moved all the way through the solar year cycle, which would contradict Koch's proposal." Bloch's argument against the existence of Koch's proposed mechanism (2012, 21-27) effectively undermines the position taken by VEENHOF (2000, 141-147 ; compare READE 2001, 2) who has opposed the notion that a lunar calendar without intercalation *may have been used* from the end of *kārum* Kaneš level II into the reign of Tiglath-pileser I.

34 WEIDNER (1928-29) ; WEIDNER (1935-36), 28-29. For the arguments against the existence of Weidner's proposed mechanism, see BLOCH 2012, 30-37.

35 See BLOCH 2012, 40 and 42.

36 Notably SASSMANNSHAUSEN 2004, EDER 2004, BOESE 2008, and VAN KOPPEN 2010.

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Synchronistic King List, the Synchronistic History, the Chronicle of Early Kings, several late inscriptions attributed to early Kassite rulers,[37] the newly published texts from the First Dynasty of the Sealand,[38] and the texts from Tell Muḥammad.[39] All of these studies offer interesting perspectives and ideas.[40] It must be emphasized, however, that Assyrian chronology provides the only relatively fixed scheme to which Babylonian chronology can be related,[41] and therefore until the remaining important questions about Assyrian chronology are settled, we cannot hope for much help from Babylonian sources from and about the early Kassite period. The material known for this time is still simply too inconclusive.

Turning to recent challenges to the NLC, most of the responses have either argued for continued use of the Middle Chronology[42] or for schemes which would place the reign of Šamšī-Adad I some 8 to 15 years lower than the traditional Middle Chronology dates for his reign.[43] The arguments for these alternatives rest ultimately on interpretations of evidence from the Old Assyrian period, including the newly reconstructed sequence of OA eponyms based on KEL manuscripts A-G and the MEC,[44] dendrochronological analysis of timbers found in the Old and Waršama palaces in Kültepe and the Sarıkaya Palace in Açemhöyük (in the ruins of which were found bullae impressed with seals of Šamšī-Adad I and Aplaḫanda of Karkemish),[45] and a solar eclipse reported in the MEC that is associated with the year following the birth of Šamšī-Adad I.[46] Proponents of the Middle Chronology and its slightly lower alternatives, we would argue, appear to regard these bodies of evidence as certain (or very nearly so), and this stance then informs their interpretations of the evidence of the AKL and *Distanzangaben* and the chronological calculations which they derive therefrom.

We acknowledge that much progress has been made both in reconstructing the Old Assyrian eponym sequence and in establishing a tree-ring sequence now spanning nearly two millennia. Yet fundamental uncertainties undermine the use of the latter as an absolute chronological anchor for the former. We do not know, for example, if the analyzed timbers were actually part of the structure of the Açemhöyük building at the time that the Šamšī-Adad sealings arrived there, and if they were part of the structure, we do not know how long after the building was constructed that the timbers fell to the palace floor where the Šamšī-Adad sealings presumably were found. We do not in fact know the archaeological context of the timbers and epigraphic finds because the relevant stratigraphy has never been published. Moreover, large timbers such as those found in palaces and public buildings were valuable and therefore liable to be used more than once. The dates such timbers were cut can serve only as *termini post quem*, the earliest possible dates for the buildings in which they have been found. In short, dendrochronology can tell us only the year a tree was cut down, while wood components found in excavated buildings may have been used and reused for centuries after the tree was felled.[47]

The unquestioned acceptance of the dendrochronological dating of the timbers from Açemhöyük and Kültepe has influenced proposed identifications of the solar eclipse mentioned in the Mari Eponym Chronicle said to have occurred in the year after Šamšī-Adad was born. By accepting as fact the premise that the dendrochronological analysis is correct – and with it the premise that the range of dates for Šamšī-Adad's reign has been narrowed to ca. 1840-1775 BC – a number of researchers have then restricted the range of their searches for possible candidates, settling finally on eclipses occurring either on 24 June 1833 BC[48] or on 24 March 1838 BC,[49] while giving less credence to other worthy candidates,[50] especially those that might be compatible with the NLC.[51] Several recent investigations of the Venus data in EAE tablet 63 have shown a similar tendency to accept the dendrochronological analysis as a given.[52]

The same is true, we would argue, of recent analyses of *Distanzangaben* which use new evidence from the KEL but operate on the premise, often unstated, that both the dendrochronological analysis and Michel's dating of the MEC

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37 For the difficulty of using these texts to reconstruct the chronology of the early Kassite period, see BRINKMAN 1976, 6-34, who observes (p. 6) : "In dealing with Babylonian chronology, one feels more than usually at the mercy of one's sources, which are often composed at a date much later than the period covered and are occasionally in conflict with less informative contemporary material."

38 DALLEY 2009.

39 IMAN JAMIL AL-UBAID, 1983.

40 SASSMANNSHAUSEN (2004) employed most of these sources, along with others including the AKL, to argue in favor of an end of the First Dynasty of Babylon shortly after the middle of the 16th century. EDER (2004) proposed a very high chronology based on his analysis of, *inter alia*, the inscriptions of Agum-kakrime and Gandaš, Babylonian King List A, the Synchronistic King List, and *Distanzangaben* in Assyrian royal building inscriptions. BOESE (2008) proposed a date around 1545 BC for the fall of Babylon on the basis of his analysis of evidence from early Kassite texts, the Synchronistic History, and synchronisms with Egyptian history. VAN KOPPEN (2010) employed an array of Babylonian historical evidence to argue in support of a chronology possibly as low as the NLC.

41 BRINKMAN 1976, 6.

42 For example, BARJAMOVIC, HERTEL and LARSEN 2012, 1-35, and ROAF 2012.

43 For example, DE JONG 2012-13, NAHM 2013, PRUZSINSZKY 2006c, and MICHEL 2002.

44 BARJAMOVIC, HERTEL and LARSEN 2012, with important earlier work by GÜNBATTI (2008) and VEENHOF (2003, 2007).

45 KUNIHOLM, KROMER, MANNING, NEWTON, LATINI and BRUCE 1996 ; MANNING, KROMER, KUNIHOLM and NEWTON 2001 ; MANNING, KROMER, KUNIHOLM and NEWTON 2003 ; NEWTON and KUNIHOLM 2004 ; MANNING, KROMER, RAMSEY, PEARSON, TALAMO, TRANO and WATKINS, 2010.

46 The "darkening of the sun" (*na'dur* $^{d}$UTU) referred to in the MEC is undoubtedly a solar eclipse and is connected with the eponymy of Puzur-Ištar. ROAF (2012, 160) suggested that the eclipse may have occurred in Šamšī-Adad's birth year, but this is very unlikely (see DE JONG 2012-13, 156 n. 13).

47 Such uncertainties are implicitly acknowledged by BARJAMOVIC, HERTEL and LARSEN (2012, 32), who, after reviewing the evidence write: "*If* the dendrochronological analysis is correct, *if* the sequence of the eponyms listed in the various Assyrian manuscripts is correct, and *if* the archaeological results obtained at Kültepe are generally to be trusted, then the evidence for the chronology of the Old Assyrian Colony Period invalidates the ULC." [emphasis added]

48 See ROAF 2012, 160-169 and NAHM 2013, 367 ; following MICHEL 2002.

49 See DE JONG 2012-13, 159-161 ; note especially his concluding statement: "Combining the radiocarbon dating of tree-ring sequences in beams used in the construction of the Waršama palace in Kanesh with the chronological constraints provided by the Venus observations during the reign of the Babylonian king Ammī-ṣaduqa and by the solar eclipse around the birth of the Assyrian king Šamšī-Adad I have shown that most probably the Low Middle Chronology (Ammī-ṣaduqa 1 = 1638 BC) is the correct one for the Old Assyrian and Old Babylonian period." De Jong therefore restricted his search between 1856 and 1835 BC. BARJAMOVIC, HERTEL and LARSEN (2012, 25) suggested that the eclipse took place in ca. 1847 BC on the basis of dendrochronological dates and their reconstruction of the Kültepe Eponym List.

50 See WARBURTON (2002, 109-110) who identified the problem as "excluding certain eclipses or preferring a certain time range because of a preferred chronology" (see also WARBURTON 2004). To his credit, ROAF (2012) included in his analysis a broader range of possible candidates than did, for example, DE JONG (2012-13) and NAHM (2013), but Roaf's statistical analysis does not include partial solar eclipses that might have been visible at Assur with a magnitude less than 0.95, although eclipses with a magnitude greater than 0.50 might also have been visible if close to the horizon (see DE JONG 2012-13, 158).

51 One such eclipse candidate that deserves serious consideration is found in ROAF 2012, 162, fig. 3 :

18 Sept. 1754 BC [-1753] [0.825 Assur] [0.800 Mari] [after sunrise in Assur, at sunrise in Mari]

(see http://eclipse.gsfc.nasa.gov/SEcat5/SE-1799--1700.html)

52 See especially NAHM 2013, DE JONG 2012-13, and DE JONG and FOERTMEYER 2010 ; compare however the result arrived at in MEBERT 2010 (fall of Babylon = 1522 BC). Mebert's analysis has been criticized both by DE JONG (2013) an advocate of the so-called Low Middle Chronology, and by HUBER (2011), long an advocate of the High Chronology.

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solar eclipse are correct and therefore arrive at dates for the reign of Ērišum I (and by extension Šamšī-Adad I) that are close to the Middle Chronology.[53] We would point out, however, that one can use the evidence of *Distanzangaben* (Shalmaneser I, Tiglath-pileser I, and Esarhaddon[54]) to arrive straightforwardly at a set of dates that fall squarely within the reign of Šamšī-Adad I as reckoned by the NLC – 1710-1679 BC[55] – regardless of whether or not one calculates from the first year of reign or the year in which the building account was inscribed.[56]

In the end, only one scheme of chronological reckoning can be correct. Arguments for ultra-high, high, middle, low-middle, and low chronologies have been made on the basis of varying analyses of differing combinations of historical, archaeological, and natural-science data, including but not limited to king lists, eponym lists and chronicles, *Distanzangaben*, synchronisms, the Anatolian tree-ring sequence, Venus phenomena, month-length data, and solar eclipses. The New Low Chronology, however, is the only scheme of reckoning which takes into account the evolution of the various pottery forms across Mesopotamia throughout the 2nd millennium BC. This evidence demonstrates that there could not have been a two-century gap between the latest Old Babylonian forms and the earliest Kassite forms – which the use of the Middle Chronology would demand – and certainly not the even longer gap called for by use of the high[57] or ultra-high alternatives.[58] The evidence is found on the plates which follow, and it can no longer be ignored. The time has arrived for it to take center stage in the 2nd-millennium BC chronological debate.

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53 See, for example, PRUZSINSZKY 2006a, 73-79, PRUZSINSZKY 2006c, 11-12, VEENHOF 2003, 51-56, VEENHOF 2007, 60-61, and especially PRUZSINSZKY 2009, 66 and 135-136. VEENHOF (2008, 31) to his credit acknowledges that "It is difficult to choose between these [various chronological] proposals, all of which, moreover, have to work with assumptions and hypotheses and as such are liable to criticism."

54 Shalmaneser I = GRAYSON 1987, 185 [A.0.77.1, lines 112-148] ; GRAYSON 1987, 189 [A.0.77.2, lines 5-21] ; Tiglath-pileser I = GRAYSON 1991, 28 [A.0.87.1 vii 60-78] (note that the inscription attributes the building of the Anu-Adad temple to Šamšī-Adad, who is mistakenly identified in the text as the son of Išme-Dagan) ; Esarhaddon = BORGER 1956, 3-5, col. iii 16-vi 27 (Ass. A) ; BORGER 1956, 6-7 lines 19-47 (Ass. B).

55 GASCHE *et al*. 1998b, 4.

56 The only assumption made is that, in the relevant accounts of Shalmaneser I and Tiglath-pileser I, the longer time-span that is cited refers back to the initial construction of the temple in question and therefore subsumes the shorter time-span that is cited (following HACHMANN 1977, 124-125, NA'AMAN 1984, 118-119, and PRUZSINSZKY 2006a, 2006d and 2009, 139, 143). The relevant accounts of Esarhaddon can be taken at face value, without emending the figure 434 to 494 (as most have done since LANDSBERGER 1954). The results speak for themselves :

Shalmaneser I : **1694** = 273 + 421(=580-159)
**1684** = 1263 + 421(=580-159) [1263= year 1 acc. to BOESE and WILHELM 1979, 23-24]

Tiglath-pileser I : **1695** = 1114 + 581(=641-60)
**1690** = 1109 + 581(=641-60)

Esarhaddon : **1694** = 680 + 580 + 434 [580=var. in Ass. A]
**1700** = 680 + 586 + 434 [586=var. in Ass. B]
**1693** = 679 + 580 + 434
**1699** = 679 + 586 + 434

57 HUBER 1982, 1999-2000a, 1999-2000b, 2000, and 2011.

58 EDER 2004.

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# KEY STRATIGRAPHIC SEQUENCES

The stratigraphic sequences described in this chapter, as well as those of other sites represented in this guide, are shown in Table 9 at the end of this volume.

## NORTHERN ALLUVIAL PLAIN

### Tell ed-Dēr

(Sippar-Amnānum, Sippar-Annunītum, Sippar-rabûm, Sippar-dūrum and Sippar-$U_4$.UL.LÍ.A)[59]

The first formal excavations were conducted by Taha Baqir and Mohammad Ali Mustafa[60] during the spring and fall of 1941. The results were published in 1945 in the first volume of *Sumer*. However, six pottery vessels found by them were drawn by us in the Iraq Museum and are illustrated in the present work.[61] Despite the assertion of Taha Baqir and Mohammed Ali Mustafa, there is no Akkadian material at Tell ed-Dēr. In our opinion the earliest remains found by them belong to the Ur III Period as do the earliest vestiges excavated by the Belgians headed by the late Léon De Meyer.

The Belgian excavations started in 1970 and came to an end in 1990 with the beginning of the first Gulf War. The vessels published in the present volume were found in Areas A, B, E, E2, E3 and F. They cover the major occupational sequence of the site, from Ur III to the third quarter of the 13th century BC.[62] For the location of these areas and those of the previous Iraqi digs, see now *MHEM* 7, plan 2.

*Area A*[63] was opened on the western slope of the western mound of Tell ed-Dēr on February 1, 1970. With its 6 m depth, the area revealed the longest uninterrupted stratigraphic sequence excavated by the Belgians and covers some 375 years between about 1975 NLC – the beginning of Ensemble IV, Phase b (IVb) – and 1600, the end of Ensemble I, Phase a (Ia).[64] The natural soil could not be reached in this area because the groundwater was at a higher level than in 1941, but it is estimated to be about one meter below the bottom of Area A.[65]

All remains belong to the realm of domestic architecture. Because of restrictions imposed by the Directorate General of Antiquities, we could not destroy the main building[66] excavated in the upper phases of this area. Therefore, the excavated surfaces diminished gradually with depth, from 930 $m^2$ on top (Phases Ia and Ic) to only 173 $m^2$ at the bottom (Phase IVb).[67] This difference could explain the relative small number of ceramics found in the Ur III and the early Paleo-Babylonian (Isin-Larsa) levels. In spite of this obstacle, surfaces of more than 6000 $m^2$ were excavated in Area A, which also produced the major part of the pottery found at Tell ed-Dēr.

In *Area B*[68] work also started in February 1970. A narrow trench 90 m long was dug through the levee surrounding the site at the only place where this structure is in contact with Old Babylonian occupation layers. About 160 $m^2$ of these occupation layers were excavated under and slightly east of the levee (on the town side). They cover some 150 years between about 1750 and 1600 (Table 9).

At the other end of the trench, under the exterior end of the levee is a large mud brick wall that was reconstructed at least two times (D 12 a-c).[69] The oldest wall (D 12 c) is around 6 m wide while the first reconstruction (D 12 b) measures only 2.80 m ; the second reconstruction (D 12 a) is badly eroded. According to their stratigraphic position, D 12 a or b could belong to the city-wall that we know had existed in Samsuiluna's time (1653-1616).[70] As for the levee itself, we could establish with the help of a geomorphologist that it was an impressive dyke-system of which the first element (D 20) was built at around 1600 in an area previously subjected to inundations. Soon after, the larger dyke-element D 21 was built on top of D 20 and an alluvial-like deposit (A 20). Later, but still in Late Old Babylonian times, the elements D 22 and D 23 were built, the latter with a width of nearly 47 m. Finally, the upper elements of the system, D 30 to D 34, are Kassite.

*Area E*[71] was opened between October 20, 1974 and November 9, 1979 on a surface of some 300 $m^2$. The area consists of 3 sectors : 1) *E* itself with, e.g., the so-called house of Ur-Utu 2) a long trench (see *MHEM* 1, Pl. 2) that starts at the southeastern end of 1), goes first through Paleo-Babylonian occupation deposits before crossing several later but not yet closely dated canals in the depression between the two mounds of the site (unpublished) and 3), the southeastern end of the trench, named *E sud*, again with Paleo-Babylonian occupation layers (see Table 9).

The latest built remains in *Area E* are Kassite foundations (Ens. I) damaged by a large later 13th century pit (Ens. 0). Below lies a complex deposit representing the period of the non-occupation of Tell ed-Dēr between the summer of 1533[72] and its resettlement sometime during the second half of the 15th century (Ens. II). Under this partly natural, partly anthropic deposit was Ensemble III with three occupation Phases, IIIb, d and f, the oldest (IIIf) being mostly destroyed by the foundation pit (IIIe) dug out for IIId. Thanks to textual sources from the archive mentioned below, we know that the property of IIIf belonged to Dame Lamassāni, *nadītum* of Šamaš,[73] who sold it during year 28 of Ammiditana (1560) to Inanna-mansum, *galamaḫ* of the goddess Annunītum. After this purchase, Inanna-mansum built a new house that he occupied (Phase IIId) until he bequeathed it, partly or totally, to his son and successor Ur-Utu slightly before his death near the end of the 5th year of Ammiṣaduqa (1546).

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59 For the ancient names of Tell ed-Dēr between about the middle of the 18th century NLC and the deurbanization of the site in 1533, see CHARPIN 1988 and CHARPIN 1992. We do not know the name of the town during the Ur III Period and at the beginning of the 2nd millennium.

60 Directorate General of Antiquities, Baghdad.

61 Pls. **71** : 1 and 3, **72** : 1, **74** : 2, **77** : 5 and 9.

62 The sanctuary of Anunītum, rebuilt by Nabonidus and destroyed by the Gutians (see BEAULIEU 1989, 227-228), was not found at Tell ed-Dēr and no area with a density of Neo-Babylonian sherds was recognized on the surface of the mounds.

63 See the reports in *TD* 1, *TD* 2 and *TD* 4.

64 See Table 9.

65 Read "1 m", not "2 m", in *RlA* 12, 543.

66 The *Bâtiment central* illustrated in *TD* 2, plans 2 to 6.

67 See now *MHEM* 7, 193 for a survey of all the surfaces dug in Area A.

68 See the reports in *TD* 1, *TD* 2 and *MHEM* 1, 140-141.

69 See *TD* 2, plan 1.

70 FRANKENA 1966, 77.

71 See *MHEM* 1, *NAPR* 6, 11-13.

72 1533 NLC corresponds to the 18th year of the reign of Ammiṣaduqa (see now TANRET 2001, 458).

73 See JANSSEN *et al*. 1994, especially pp. 119 and 121-122.

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After the death of Inanna-mansum, Ur-Utu continued to occupy the house until 1533, the year he reconstructed part of it and restored some other sections. He then put the archives back in the house (IIIb) – more than 2000 texts – but didn't have time to reclassify them before a fire broke out some five months later.[74] Although he tried to save documents during the fire, Ur-Utu never came back to clean up or rebuild his house. After the summer of 1533, there is no information about Tell ed-Dēr until the site was resettled in the Kassite Period.

*E2*[75] is a sounding opened west of Area E when we were looking for a place with Kassite remains. The vestiges of two 14th century Phases (Ia and Ic) were cleaned in a square of 5 by 5 m, but the only bowl reproduced here (Group 20 H 1) was found in the surface deposits (Pl. 36 : 7).

*Sounding E3* was ultimately enlarged to nearly 500 $m^2$ in 1986 and 1987.[76] Despite the presence of thirteen pits – at least five being Late Kassite, one a clandestine 19th-century gallery and seven perhaps being unused grave-pits – and nearly forty Seleuco-Parthian and later burials, parts of at least five houses were excavated in the two Phases Ia and Ic, which cover the late 15th, 14th and early 13th centuries. These remains rest on top of the same complex deposit recognized in Area E (Ens. II). Below this deposit were burnt Late Old Babylonian remains (Ens. III) like those found in Area E, but we only sounded them in a small trench before stopping work in this area.

*Area F*[77] was dug between October 12 and December 13, 1988 on a surface of some 1400 $m^2$. The objective was to study the urbanism of a Late Old Babylonian quarter, the walls of which were visible in aerial photographs. The surface of the whole area was cleaned in order to get the plan of a large building ; some deeper soundings allowed a better dating of the structure. Burial 392 was intrusive in this area. The pottery found in this burial is particularly interesting because it belongs to an early Kassite, mid-15th century repertoire not yet attested elsewere.[78] We suggested that it was the burial of a member of the temple of Annunītum, who was in charge of the building during the middle of the 2nd millennium, when the site was deurbanized.

### Tell ed-Deylam (Dilbat)

Second-millennium levels were exposed in a sounding designated *Area B*.[79] In Levels V-II parts of houses and associated burials were uncovered. Based on the pottery these levels can be dated to the Late Old Babylonian Period, that is, to the 16th century NLC, after the reign of Samsuiluna.

Above Level II there is a gap in occupation until the Late Kassite Period, approximately the 13th century, when the southern end of the site, including Area B, was an industrial area devoted to making pottery. Level I included the fire-boxes of several superimposed kilns, in addition to extramural burials.

A systematic collection of surface ceramics from the site yielded no pottery from the period between the Late Old Babylonian and Late Kassite Periods. If Tell ed-Deylam was occupied at all during that time, habitation must have been very sparse.

## SOUTHERN ALLUVIAL PLAIN

### Umm al-Hafriyat

*Area A* is a sounding to natural soil through the highest mound at the large site of Umm al-Hafriyat, located to the east of Nippur and excavated by the Oriental Institute Nippur Expedition in 1977. Parts of houses and associated burials were uncovered in Area A. However, no dated tablets were found in this operation. Based on the pottery, the remains from Level III belong to the Early Isin-Larsa Period, the 19th century NLC. The pottery of Level II can be dated to later in the Isin-Larsa Period. At the top of the sounding, eroded surface remains included pottery typical of the era of Hammurabi and Samsuiluna in the 17th century.

### Nippur

*Areas TA and TB* were excavated on the triangular mound at Nippur called Tablet Hill during the three campaigns of the Joint Expedition of the University Museum of Philadelphia and the Oriental Institute of the University of Chicago between 1948 and 1952.[80]

Between them, Areas TA and TB provide long sequences of material from the 2nd millennium BC. Area TB's sequence begins late in the Akkadian Period and continues until the time of Samsuiluna,[81] though the levels dated to the time of Hammurabi and Samsuiluna and all later stratigraphy in Area TB were already largely removed during the University of Pennsylvania excavations of the late 19th century AD. The excavated sequence in Area TA begins in the latter part of the Ur III Period and continues through the reign of the Old Babylonian king Samsuiluna, as well.[82] After that, there is a gap in the stratigraphy. The last century of the Old Babylonian Period, post-Samsuiluna, is not present. The occupational sequence in Area TA resumes in the Kassite Period.

Elizabeth C. STONE (1987) has restudied the Isin-Larsa and Old Babylonian levels of Areas TA and TB, highlighting the many problems and limitations of these sequences as excavated, and we have consulted her analysis with profit. We have nevertheless used the TA and TB pottery in this study, because these sequences are secure enough for us to identify shapes that can be assigned to the 20th (Ur III), 19th (Early Isin-Larsa) and 18th-early 17th (Late Isin-Larsa) centuries NLC, as well as to the mid-dle-to-late 17th century, the era of Hammurabi and Samsuiluna. The comprehensive collection of pottery from Areas TA and TB is highly illustrative of the shapes being produced in the Nippur region from the Ur III Period down to the time of Samsuiluna.

After a substantial gap, Tablet Hill was resettled in Kassite times. However, using the finds from the Kassite and later levels in Area TA is made difficult because of a lack of stratigraphic control during their excavation. Nevertheless, it has been shown that the latest Kassite material in Area TA should be dated to the latter half of the 13th century on the basis of texts from a small business archive abandoned on the final living floor of a Late Kassite building ; the latest dated text in this archive is from Kudur-Enlil, year 6.[83] Even though the material from these levels can now be reassigned with a high degree of confidence based on the results of more recent excavations in the adjacent Area TC,[84] we have been very cautious about relying on the Kassite material from Area TA, and only three pieces appear in this study.[85]

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74 See now TANRET 2001, 463.

75 See the report in *NAPR* 6, 14-16.

76 See the reports in *NAPR* 6, 16-94 and *NAPR* 10, 39-84.

77 See the reports in *NAPR* 3, 15-39.

78 See *NAPR* 3, Pl. 5 and Pls. **83** : 2 and **99** : 4 of the present work.

79 ARMSTRONG 2001 and 1992.

80 The excavation of Areas TA and TB is described in *OIP* 78, 34-149. *OIP* 129, 6, fig. 2 is a topographic map of Nippur that shows the location of all the excavation areas mentioned here.

81 The latest dated Old Babylonian tablet from a good context in Area TB, from Level E-2, is dated to Samsuiluna year 26 (STONE 1987, 118 : Table 23).

82 The latest dated Old Babylonian tablet from a good context in Area TA, from Level XA, is dated to Samsuiluna year 29 (*Ib.*)

83 ARMSTRONG 1989, 128-129 and 163. This archive, 2NT 740-763, was found on the final floor of TA Locus 90, Level IV, which had been dated by the excavators to the early 1st millennium (see *OIP* 78, Pl. 75 : A). These texts were not considered by them in determining a date for this level. Locus 90 has been reassigned to the Late Kassite Period.

84 GIBSON 1984 and ARMSTRONG 1989, 99-174.

85 Pl. 83 : 7 (TA VIII), Pl. 132 : 3 (TA VII) and Pl. 133 : 5 (TA VII).

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Another long hiatus interrupts the TA sequence, followed by a reoccupation in the first half of the 1st millennium.

The excavation of *Area TC* at the southern end of Area TA was undertaken in 1985 in order to reexamine the stratigraphy of Area TA.[86] The earliest material reached in Area TC was the top of the latest Old Babylonian settlement (Level IX). Above this level was a deposit of wind-laid sand and topsoil, evidence of the abandonment of part of the site (Level VIII). This layer has been identified as the remains of a fossilized dune.[87] Level VII represents a shallow, heavily eroded Late Kassite occupation, including wall fragments and a burial (Burial 5). Above Level VII, Level VI dates to the early 1st millennium.[88]

The West Mound of Nippur was investigated by the Oriental Institute's Nippur Expedition over the course of a number of seasons between 1972 and 1990. Several areas produced material important for the present study, including Areas WA, WB, WC-1, WC-3 and WF.

Excavations in *Area WA* have exposed part of a temple building, apparently dedicated to the goddess Gula.[89] The earliest stratified pottery from Area WA comes from Level VI. After the 13th season of Chicago's excavations at Nippur in 1975, Level VI was subdivided into upper and lower phases, WA VIA and VIB, respectively. WA VIA represents a rebuilding of the temple within Level VI.

On the lowest floor of WA VIA the fragment of a stone jar dedicated to the god Nin-šubur for the life of Ibbi-Sin, the last king of the Ur III Dynasty. This indicates that most, if not all, of WA VIA should post-date the Ur III Period. The pottery from this level suggests WA VIA is earlier, as opposed to later, in the Isin-Larsa Period. We have situated it in the 19th century and into the early part of the 18th. Below WA VIA, WA VIB extends back into the 20th century.

Above WA VIA, we have placed WA V in the 18th and early 17th centuries. The most common bowl shape in WA V is our Group 20 $E_1$, which places WA V broadly between the 20th and 18th centuries. Absent from WA V, however, is Group 20 $D_1$, which is diagnostic for the 20th and 19th centuries at Nippur. A few, and only a few, shapes from WA V look like they could be from the time of Hammurabi and Samsuiluna. However, the highly characteristic black-painted designs found on a host of open and closed forms from the time of Hammurabi and Samsuiluna are entirely missing from the sherds of WA V. Therefore, the assemblage of pottery from WA V should be earlier than the pottery of WB IV (see below), which dates from the end of the rule of Rim Sin I of Larsa over Nippur through the abandonment of the city during the reign of Samsuiluna. This leads us to conclude that WA V does not extend beyond the beginning of the 17th century at the latest. It represents the latter part of the Isin-Larsa Period.

Area WA Level IVC, the earliest post-Old Babylonian context, consists of pits containing Kassite shapes that are completely different from the pottery of the preceding WA V. From the pottery alone it is clear that there is a gap of significant duration between Levels V and IVC. The pottery from the pits of WA IVC, though undated, consists of rounder, stouter and more open variants of the later pottery found above in Level IVB, the Kassite Gula Temple. The Level IVB pottery can be dated to the 13th century based on comparisons with pottery from other areas. The pottery of Level IVC has been dated to around 1400 based on comparable shapes from Tell ed-Dēr and other sites.

Levels IV-II of *Area WB* have yielded 2nd millennium material.[90] Level IV has provided Old Babylonian pottery from the time of Hammurabi and Samsuiluna. In her unpublished Ph.D. dissertation, Judith A. FRANKE (1987) divided House A of Level IV into 6 sublevels, 1-6. Level IV1 represents the foundations of the house in Level IV, while Level IV6 is its latest occupation, dating to the reign of Samsuiluna. Where available, we have indicated the sublevel of the WB IV pottery on the plates. The latest text from Level IV is dated to Samsuiluna year 13.[91] Over the ruins of Level IV lay a deposit of wind- and water-laid silt.[92]

Above this deposit was a layer comprised largely of pits and burials, Level III. The material from Level III represents an early phase of Kassite pottery. Level III produced no dated texts, but we have assigned its pottery to the 14th century because the vessels are intermediate in shape between the earliest Kassite vessels we have identified in Babylonia (which we have dated to the late 15th century and around 1400) and those of the 13th century.

The excavation of Level II revealed several rooms of a palace. The end of this level could be dated to the latter part of the 13th century, based on its pottery and on the evidence of the tablets. Unfortunately, none of the dated tablets found in the excavation of WB II was from a stratigraphically secure context, because of the disturbances created by the 19th-century AD excavations in this area. Nevertheless, there is little doubt that the tablets found, including numerous administrative texts, were originally from the palace. The dated texts come from the reigns of Kudur-Enlil and Šagarakti-Šuriaš (FRANKE 1978, 70) and Kaštiliašu IV (13 N 107). Therefore a date late in the 13th century for the end of the level seems reasonable.

A large house of the Late Kassite Period was excavated near the southern corner of Nippur in *Area WC-1*. The end of Level II is dated to the latter half of the 13th century based on a text from Šagarakti-Šuriaš year 4 that was found in the occupational debris above its uppermost excavated floor.[93] Levels III and IV extend back in time from the latter half of the 13th century.

Above Level II, Level I includes the eroded remains of later periods, including what were probably intramural burials of the early 1st millennium BC and a large number of Parthian burials of the late 1st or early 2nd century AD.

The southern corner of the Nippur city wall was excavated in *Area WC-3*. Though later levels were also exposed, this area consisted principally of Ur III remains. The Ur III material was excavated in Level V, and this level has been subdivided into four phases, VD-VA, following the explanation and description in GIBSON *et al*. 1998, 21-27.[94] Level VD comprised the earliest material, including small houses. The primary construction in Level VC is Building Z, a large structure probably having a public function. Baked bricks in single-chamber construction in Level VC bore the stamps of Ur-Nammu and Amar-Sin. In Level VB the casemate foundations of the city wall were laid, destroying the construction made with these bricks. The Amar-Sin bricks, therefore, provide a *terminus post quem* for the laying of the city wall's foundations, and make it likely that the city wall in Area WC-3 is the one referred to in the name of the sixth year of Ibbi-Sin, Amar-sin's successor (GIBSON *et al*. 1998, 26). Level

86 GIBSON 1984 and ARMSTRONG 1989, 47-52.

87 ARMSTRONG and BRANDT 1994.

88 GIBSON 1984, a preliminary report, makes reference to a Dark Age level post-dating the Kassite Level VII in Area TC. Such a level does not exist, and the pottery in question was characteristic either for the Late Kassite Period or for the early 1st millennium. Sherds of both periods were found mixed together in the foundation fill of Level VI of the early 1st millennium, which was sunk into Level VII. This gave rise to the initial misunderstanding. Further study permitted the levels to be disentangled.

89 GIBSON 1975 and 1978 provide preliminary reports for the excavations in Area WA.

90 GIBSON 1975, 104-122 and FRANKE 1978 provide preliminary reports on the excavations in Area WB.

91 CIVIL 1975, 128, No. 11 and FRANKE 1978, 64.

92 FRANKE 1978, 63.

93 ZETTLER 1993, 23.

94 These level and phase designations are not found in GIBSON *et al*. 1998 ; McG. Gibson subsequently supplied them to us.

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VA was the superstructure of the city wall, which covered and sealed all the earlier structures.[95]

In Level IV, Area WC-3 was unoccupied except for a burial of Isin-Larsa date (Burial 65). Level III includes the Kassite city wall, Late Kassite remains (13th c.) immediately inside the wall and a moat along its outer face. Level II can be dated to the early 1st millennium, when a wall again enclosed the southern corner of the site.

*Area WF*, excavated in 1989 and 1990 just southeast of Area WA, included 2nd-millennium levels.[96] Levels X through VB belong to the Ur III Period and possibly also to the Early Isin-Larsa. The badly eroded Level VA is Kassite (approx. 14th-13th c.), based on the the pottery found in Burials 9 and 12.

## Išān Baḥrīyāt (Isin)

This large ruin, about 150 ha in size, was excavated between 1973 and 1989 by a German team under the direction of the late Barthel Hrouda, University of Munich. Fifteen sizable areas were explored mainly near the surface of the site because one of Hrouda's principal aims was to locate the Isin I and/or Isin II royal palaces.[97] Four volumes with preliminary reports and specific studies were published in 1977, 1981, 1987 and 1992 ; they are introduced here as *Isin* 1, 2, 3 and 4. Second millennium pottery published in the present volume was found in the following areas. The dates given below are those of the excavators, except when completed with NLC.

*Gula-Tempel*.[98] The vestiges of this temple belong mainly to the Kassite and Neo-Babylonian periods. However, under Room XXIX plano-convex bricks were disovered (*Isin* 4, 17), while remains of the Ur III and Isin-Larsa periods are attested in the area of the monumental stairs built against the northwest façade of the monument (*Isin* 4, 14). Farther north, between 120/165 N and 59/80 W, the excavators also mention the presence of Isin-Larsa and Old Babylonian material (*Isin* 3, 9 and 14, and *Isin* 4, 31-32).

(*NA* I)[99] *Nord-Abschnitt* I.[100] A dog cemetery, dated to around 1000 BC, was found in the western part of *NA* I. Below was a 32.50-meter-long ramp-like structure with 8 irregularly distributed stamped bricks of Adad-apla-iddina I (1068-1047). A later building was located to the northeast of this structure, but its date is not clear. Finally, an incomplete Late Kassite vessel (our Pl. 97 : 3) could belong to an earlier occupation in this area. An Ur III cylinder seal and reused bricks of Amar-Sîn (1952-1944 NLC) were found in a deep sounding (*Tiefschnitt*).

(*NA* II) *Nord-Abschnitt* II.[101] This area was first investigated in 1974 with the initials *N* II (*Isin* 1, 21-30). In 1975, an extension to the North was abbreviated *NA* II, *nördlicher Teil* (*Isin* 2, 27-48) while the original area *N* II was renamed *NA* II, *südlicher Teil* (*Isin* 2, 49). Another extension to the East was abbreviated *NA* III (see below). *Schicht* 1 is dated *neu- bzw. spätbabylonisch* (*Isin* 1, 21) while *Schicht* 2, with one, perhaps two, texts dated to the reign of Marduk-nādin-aḫḫē (1099-1082) (*Isin* 2, 100), may belong to the period of the Second Dynasty of Isin. *Schicht* 3 is Old Babylonian with texts dated between Samsuiluna 26 (1627 NLC) and presumably Hammurabi 31 (1665 NLC), his first year as king of Isin.[102] According to KARSTENS (1981, 40), *Schicht* 4, finally, belongs to the Isin-Larsa Period.

(*NA* III) *Nord-Abschnitt* III.[103] A probable Neo-Babylonian house, reused during the following Achaemenid Period (*Isin* 2, 52), was discovered in this area. A sounding dug to a depth of 1 meter below the floor of its courtyard[104] (*Tiefschnitt Hof* 4, see *Isin* 2, plan 8) revealed hundreds of 13th-century vessels ; some of them are illustrated in *Isin* 2, Pl. 18 : 2. The bowl published here on Pl. 37 : 14 was found in this deposit, probably a pit.

(*NOA* I) *Nordost-Abschnitt* I.[105] A large and a small house directly under the surface of this area were excavated in 1983 and 1984. According to SPANOS (1987a, 21), the two *Bauphasen* recognized in both buildings are *altbabylonisch*.

(*NOA* II) *Nordost-Abschnitt* II.[106] Foundations of a small (about 18 by 12.50 m) but opulent-looking building and remains of Isin-Larsa/Old Babylonian houses were excavated by SPYCKET (1987) in the northern part and by HAUSSPERGER (1987a) in the southern part of this area. One text is dated to year 1 of Enlil-bāni (1766 NLC).

(*NOA* III) *Nordost-Abschnitt* III.[107] One small and one medium-sized house were dug in 1984 by HAUSSPERGER (1987b and c). Twelve school texts (see WILCKE 1987, 112) and several other documents were found in this area. One was dated to the reign of Samsuiluna and another to year 31 of Hammurabi (1665 NLC ; WILCKE 1987, 118). About a meter below the floor of Room 5 was found an inscribed clay cone of Sin-māgir (1731-1721 NLC), king of Isin.[108]

(*NOA* IV) *Nordost-Abschnitt* IV.[109] This area was dug in 1984 by SPANOS (1987b). Parts of several larger Old Babylonian houses were unearthed, one of them with tablets found in (*sic*) the floor ; two bore dates : Hammurabi, year 38 (1658 NLC) and Samsuiluna, year 12 (1641 NLC).

(*SA*) *Süd-Abschnitt*.[110] During the first season (1973), a long trench opened southeast of the temple of Gula revealed part of a building (*Gebäude* A) that, according to S.A.S. Ayoub, was in use between Ur III at the earliest and the Old Babylonian Period (*Isin* 1, 34-35). During the second season (1974), the excavation of *Gebäude* A was completed and a second building (*Gebäude* B) – dated to the Akkadian Period (*Isin* 1, 35) – was uncovered southwest of *Gebäude* A. The 1973 trench was also extended to the north where two *Bauphasen* of a second Akkadian building were explored (*Isin* 2, 37).

(*SOA*) *Südost-Abschnitt*.[111] Excavations in this area took place in 1977 and 1978 (SPYCKET and STROMMENGER 1981) and, eight years later, in 1986 and 1988 (SPYCKET 1992). The foundations of two large contiguous buildings were unearthed in 1977 and 1978 (*Isin* 2, 56-57, plan 9). On the eastern side, the foundation pit clearly cut more modest older houses (*Isin* 2, plan 9 and Pl. 21 : 2). It was noted that some of the foundations of the more western complex were built on top of older walls that had a plaster coating. Old Babylonian documents were discovered in the fill between the foundations of the eastern building, in the debris of the older building with plaster-coated walls, as well as in the modest older houses near the eastern edge of the area (*Isin* 2, 57, 58, 92). During the 1986 and 1988 campaigns, the area

95 The superstructure of this wall was 14 m wide in Area WC-1 to the northwest of Area WC-3.

96 *OIP* 129.

97 For the locations of the different operations, see *Isin* 4, plan 1.

98 See *Isin* 2, 9-25, *Isin* 3, 9-14 and *Isin* 4, 11-33.

99 The abbreviations between parentheses are those used in our plate legends.

100 See *Isin* 1, 17-20.

101 See *Isin* 1, 21-30 (*N* II), *Isin* 2, 27-48 (*NA* II, *nördlicher Teil*) and *Isin* 2, 49 (*NA* II, *südlicher Teil*).

102 *Isin* 1, 88 and note 1. *Isin* 2, 95.

103 See *Isin* 2, 51-53.

104 On page 52, line 40, of Isin 2, read des vorhin genannten neubabylonischen Baues instead of des vorhin genannten altbabylonischen Baues.

105 See *Isin* 3, 17-21.

106 See *Isin* 3, 23-28.

107 See *Isin* 3, 28-34.

108 *Isin* 3, 114-116. On p. 114 one can find the precise location of the document.

109 See *Isin* 3, 35-39.

110 See *Isin* 1, 31-32 (first season) and 33-35 (second season).

111 See *Isin* 2, 55-58 and *Isin* 4, 37-40.

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was extended north of the western building. About 90 tablets were found here in 1986, most of them belonging to the reign of Enlil-bāni (1766-1743 NLC) (*Isin* 4, 102).

(*WA*) *West-Abschnitt.*[112] Four soundings were opened in 1978 by A. Spycket west of Operation *NA* I. Old-Babylonian and Isin-Larsa walls were found below layers supposed to belong to the end of the 2nd millennium (Isin II ?) and the 1st millennium BC.

(*WA* III) *West-Abschnitt* III.[113] This area was excavated in the spring of 1989 by SEIDEL and TEZEREN (1992). Here the foundations of two larger Old Babylonian/Isin-Larsa houses were surrounded by smaller, probably slightly earlier, units.

### Sinkara (Larsa)

The 71 vessels from Larsa published here were all uncovered in the excavations of the French expeditions : 39 from Jean-Louis Huot's digs and 32 from the earlier undertakings of André Parrot. Thanks to the kindness of our colleagues from the Louvre and from the Larsa expedition we could examine and redraw most of the vessels published here. Although the stratigraphic position of Parrot's vessels is not always well established, we have illustrated them because they are usually complete and therefore are representative for the southernmost alluvial plain. Most of Huot's ceramics shown here – 34 of a total of 39 vessels – were found in the Old Babylonian residences Nos. 27 and 59. They date to the middle of the 17th century NLC.[114]

### Al-Hiba (Lagaš)

Al-Hiba, ancient Lagaš, was excavated by a team from Institute of Fine Arts of New York University and the Metropolitan Museum of Art (HANSEN 1978). After its flourit in the 3rd millennium Lagaš continued to be occupied during the early 2nd millennium down to the reign of Samsuiluna (THUREAU-DANGIN 1910, 129). An early 2nd-millennium sequence has been excavated in Area B, where remains of the earlier Bagara Temple of Ningirsu were also uncovered. We have identified pottery from the Early and Late Isin-Larsa Periods, as well as from the Old Babylonian Period, in the ceramic material provided us by expedition leaders Donald Hansen and Edward Ochsenschlager. We have included this material primarily as evidence of the geographic range of a number of shapes, particularly as very little information is available about the pottery from southeastern Babylonia in the early 2nd millennium.

A portion of the pottery from al-Hiba included in this study has come from two sets of burials. A group of approximately contemporary burials found in the first season, labeled with the prefix 1 HB, has been dated by a tablet of Sin-iddinam of Larsa that was found in one of them (HANSEN 1978, 76). Sin-iddinam ruled in the middle of the 18th century, and this tablet supports dating these burials in the latter part of the Isin-Larsa Period. A second group of burials, excavated in the fifth season and bearing the designation 5 HB, can be dated somewhat earlier, during the Early Isin-Larsa Period, based on the associated pottery.

## MIDDLE EUPHRATES

### Khirbet ed-Diniye (Harrâdum)

Khirbet ed-Diniye, ancient Harrâdum, was excavated for six seasons between 1981 and 1988 by a French team directed by Christine Kepinski-Lecomte as part of the Haditha Salvage Project.[115] The earliest layer, Layer Pre-3D, dates to the early 17th century, and could be connected with the building activities of Layer 3D.[116] After Layer 3D, the site was abandoned briefly, probably after the destruction of Mari by Hammurabi. Hammurabi's son, Samsuiluna, probably resettled the town, because the earliest document found in Layer 3C dates to year 26 of his reign. Thereafter the settlement at Harrâdum continued for about a century. The uppermost Old Babylonian layer, 3A, has yielded the latest Old Babylonian document, a tablet dated to Ammiṣaduqa year 18 (= 1533 BC[117]). After Layer 3A the site remained unoccupied until some time in the 12th century, when the Assyrians established a settlement on top of the Old Babylonian ruins.

## DIYALA BASIN

### Tell Yelkhi

Tell Yelkhi in the Upper Diyala Basin was excavated as part of the Hamrin Salvage Project between 1977 and 1980 by a team of Italian archaeologists associated with the *Centro Ricerche Archeologiche e Scavi di Torino per il Medio Oriente e l'Asia*. The site yielded a long sequence of 2nd-millennium levels that has been published in several reports.[118] The pottery has been published by BERGAMINI (2002-03), GABUTTI (2002-03) and VALTZ (2002-03). In the introduction to pottery reports, the stratigraphic sequence and its dating is laid out (BERGAMINI *et al.* 2002-03) ; that information is reproduced here, along with our proposals for redating several levels :

| Level and Phases | Excavator's Dating (MC) * | Excavator's Dating (NLC) | Our Dating (NLC) |
|---|---|---|---|
| Ia, b, c | end 15th-beg. 12th c. | end 15th-beg. 12th c. | 14th c. |
| II | 16th-15th c. | 15th c. | 15th c. |
| IIIa, b | 19th-18th c. perhaps 17th c. for Phase IIIa and post-abandonment (Old Babylonian) | 18th-17th c. perhaps 16th c. for Phase IIIa and post-abandonment (Old Babylonian) | first half of 16th c. (Late Old Babylonian) |
| IVa b | 19th c. (Isin-Larsa) | 18th c. (Isin-Larsa) | latter half of 17th c. (Old Babylonian) |
| Va, b, c | 20th c. (Isin-Larsa) | 19th c. (Isin-Larsa) | 18th c. (Late Isin-Larsa) |
| VIa, b, c | 21st-20th c. (Late Ur III or initial Isin-Larsa) | 20th-19th c. (Late Ur III or initial Isin-Larsa) | 19th c. (Early Isin-Larsa) |
| VII | Ur III. | Ur III | 20th c. (Ur III) |

Dates for Tell Yelkhi proposed by the excavators and ourselves.
MC = Middle Chronology, NLC = New Low Chronology (*MHEM* 4)
* BERGAMINI *et al.* 2002-2003, 5-7.

As can be seen above, there are two places where there is a substantial difference in the dating between the excavators and ourselves : Levels IV-III and Level I.

The pottery found at Tell Yelkhi is not typically Babylonian ; it must be considered to be peripheral to the Babylonian ceramic tradition, and the majority of shapes from Tell Yelkhi are not shown in this guide. However, there are a number of identical, or at least similar, shapes, that are found in both regions.

Of particular importance for our dating of Level IV and III at Tell Yelkhi is the presence of fragmentary bottles of our Group 150 $A_2$ in both levels (GABUTTI 2002-03, Pl. 74 : 13-15 ; our

112 See *Isin* 2, 59-60.

113 See *Isin* 4, 40-48.

114 See CALVET 1996 and GASCHE 2008.

115 See KEPINSKI-LECOMTE (ed.) 1992 for the publication of the Old Babylonian levels.
See also the recent contribution of CHARPIN (2013) for a survey relative to the foundation, name and function of the town.

116 SAUVAGE 1995, 44, fig. 2.

117 This is also the year Tell ed-Dēr was deurbanized.

118 INVERNIZZI 1980 ; BERGAMINI 1984 ; BERGAMINI *et al.* 2002-03, 5-8.

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Pl. 78 : 10 and 12-13). These bottles are diagnostic for the time of Hammurabi and Samsuiluna in Babylonia itself, and they show that Level IV, in particular, cannot be earlier than the time of Hammurabi, and could well be later. We have therefore placed Level IV in the latter half of the 17th century. Level III follows in the early 16th.[119]

Concerning Level I, the Tell Yelkhi vessels found in Level I look earlier from those found at nearby Tell Zubeidi and Tell Imlihiye, which are dated to the 13th and early 12th centuries. In form the Tell Yelkhi vessels fall midway between the earliest Kassite shapes we have identified in Susiana and Babylonia, dated to the 15th century and the beginning of the 14th century (Pl. 96 : 2-3 and 8-9 ; and Pls. 99-100), and the large number of Late Kassite shapes from Babylonia and elsewhere in the Hamrin (Pls. 96 : 10 to 97 : 17 ; and Pls. 101-103). The Tell Yelkhi vessels most closely resemble the 14th-century Kassite shapes from Nippur (compare Pl. 96 : 4-5 [Nippur] with 6-7 [Tell Yelkhi] ; and Pl. 99 : 6-7 [Nippur] with Pl. 100 : 1 [Tell Yelkhi]).

Moreover, at Tell Yelkhi the Babylonian shapes are a clear minority of forms among a great number of local, that is, non-Babylonian shapes. The situation is completely different at Tell Zubeidi, dated to the 13th and early 12th centuries. There the Babylonian forms overwhelmingly predominate, and their shapes are Late Kassite. From this we conclude that shapes at home in Kassite Babylonia first appeared in the Hamrin Valley in relatively small numbers in the 14th century. In the 13th century, however, the numbers of Babylonian shapes grew tremendously. Most of the production at the kiln site of Zubeidi consisted of typical Babylonian vessels.[120]

For these reasons we have dated Tell Yelkhi Level I only to the 14th century. If the level extended into the 13th century or later, we would expect there to have also been Babylonian ceramic remains that looked more like the Late Kassite pottery of Tell Zubeidi, in terms of both shape and relative quantity.

### Tell Kesaran

Tell Kesaran is a small site in the neighborhood of Tell Yelkhi in the Hamrin Valley. Of interest to us are the finds from the two earliest levels of the site. Eight pottery kilns dated to the Kassite Period were excavated in Level I. At this time Tell Kesaran was an industrial site, similar in character to nearby Tell Zubeidi. In Level II, which follows Level I, traces of domestic occupation were found, including a number of burials containing pottery of approximately 12th-century date.[121] Three vessels from Level II are illustrated in the present work.[122]

## SUSIANA

### Susa

Sixty-one of 69 vessels from Susa published here were found in Ghirshman's stratigraphic *Chantier* A, Levels XI to XV,[123] and *Chantier* B, Levels V to VII, the first being located in the northern part of the *Ville Royale*, the second in the southern part of the same mound. These two operations are still the best documented in Susiana for the span of time between the middle of the Paleo-Elamite II Period (2015-1880 NLC)[124] and about 1400 BC (Meso-Elamite I/beginning of ME II). A crucial point in the stratigraphy of Susa is that there is no gap before and after the fall of Babylon.[125]

Some of the Susa material was reexamined at the Louvre by Nina PONS (1991), while we looked again at the widely attested decorated vessels represented by Plate 75 : 8, 9 and 10. In addition, three pieces from Susa illustrate the prolongation of the simple straight-sided bowl of Group 10 $A_1$ (Pl. 12) well into the 11th century.

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119 Additional vessels from Levels IVb to IIIa at Tell Yelkhi reinforce our conviction that these levels should be situated in the 17th and 16th centuries NLC instead of a century or more earlier. Compare the dating of the following vessels in this guide with that of their counterparts from the alluvial plain: Pls. **51** : 11-12 (Group 60 $A_{1\&2}$), **52** : 17 (Group 65 $A_1$), **61** : 6 (Group 95 $A_2$), **85** : 11-12 (Group 170 $A_1$) and **86** : 3 (Group 170 $C_1$).

120 This appears also to have been the case at Tell Kesaran, a kiln site close to Tell Yelkhi (VALTZ 1985, 69).

121 *Ib*. and FIORINA 2007, 11-17.

122 Pls. **12** : 2, **94** : 5 and **95** : 12.

123 Table 9 of the present work shows a level "Pre-XV" in the column of *Chantier* A ; this label, introduced here for the first time, designates the remains found under level XV during the 20th season (November 20, 1965 - April 15, 1966). The "Pre-XV" walls excavated by R. Ghirshman are in the central part of XV and are hatched in GHIRSHMAN 1967, fig. 2.

124 See our Table 9 and STEVE *et al*. 2002-03, 430-440.

125 The absence of a gap for the same period has also been observed at Tell Muhammad, situated in Baghdad, east of the Tigris, but the stratigraphy is less well controlled in this excavation.

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# DESCRIPTION OF POTTERY GROUPS

## INTRODUCTION

### The Arrangement of the Shapes

Our aim has been to produce a guide to the pottery shapes of Babylonia in the 2nd millennium that is useful for archaeologists who, like ourselves, work with the pottery from excavations and surveys. The vessels presented here are primarily those that occur with some frequency, though rarer shapes have also been included because of their diagnostic character or because they are intrinsically interesting. However, miscellaneous ceramic objects, for example, stands, lids, strainers and the like, have not been presented here.

The vessels have been arranged in *groups* based on shape that, in turn, have been organized into *families*. Groups belonging to the same family have similar shapes. The family identification number is a multiple of 5. Family designations, therefore, look like : Family 5, Family 10 and so on. Our use of multiples of 5 is primarily for ease of reference and to facilitate remembering family designations, should that prove to be desirable.

The group is the fundamental unit of organization. Vessels within a group share specific characteristics having to do with the shapes of their bodies, rims and bases. The groups within a family are distinguished by letters of the alphabet – A, B, C etc. An additional numeral in subscript – $_1$, $_2$, $_3$ or $_4$ – identifies the type of base : $_1$ equals string-cut and other flat bases that have not been smoothed out or otherwise reshaped after the initial forming of the vessel ; $_2$ equals finished bases upon which a vessel can stand, at least theoretically, including ring bases and other types of bases and pedestals that have either been shaped from or added to the bottom of the vessel ; $_3$ equals convex or round bases ; and $_4$ equals finished (or more-or-less finished) bases upon which a vessel cannot stand, e.g., so-called nipple, button and knob bases. Group designations, therefore, look like : Group 5 A $_1$, Group 10 B $_2$ and so on.

The arrangement of the groups is shown in the synoptic tables laid out on Tables 1-8 at the end of the volume. Tables 1-8 are intended to serve as a kind of table of contents for the pottery shapes presented here and should make it easier to locate specific groups (see the section entitled “Synoptic Tables” below).

Two scales have been used for the drawings on the plates : 1 : 2 for the small and medium-sized vessels on Plates 1-115 and 1 : 5 for the large and very large vessels on Plates 116-136. All measured drawings of profiles and vessel decoration on a given plate are at the same scale. This, we hope, will facilitate comparisons among vessels and groups. However, photographs and renderings appear on the plates at various scales depending on the available space.

Among the small-to-medium-sized shapes (scale 1 : 2), we begin with the open vessels. The open-vessel families have been arranged more-or-less according to the ratio of width to height, so that lower, broader shapes precede higher, narrower shapes. Thus, low trays and platters (Family 5) are followed by bowls which, in turn, are succeeded by pots with inturned profiles.

The progression among the closed forms is from geometrically simpler shapes to more complex ones. Because the closed shapes include a much larger number of different forms than do the open shapes, compromises and sometimes near-arbitrary decisions had to be made in order to achieve the final arrangement. The closed shapes start with narrow conical vessels (Family 65) and continue with those that are cylindrical or nearly so, many of the latter having a constriction below the rim creating the suggestion of a neck. Vessels with minimal shoulders and/or necks follow ; the shoulders and necks of succeeding groups become more prominent. Among vessels of the same general shape shorter forms precede taller ones.

The arrangement of the large-to-very-large shapes (scale 1 : 5) is much less complex, moving from families of very large open shapes (beginning with Family 260) to those of large closed shapes and very large closed shapes.

As has been stated above, the vessels belonging to a specific group share morphological characteristics. Depending on the group, these characteristics may be more narrowly or broadly defined. Whether or not to include variant shapes within a particular group or to separate them has depended on factors like the frequency of occurrence of the vessels in question and their spatial and temporal distribution relative to the group as a whole.

Even though shape is the most important factor in the definition and arrangement of the groups in this guide it is not necessarily the only factor in determining the placement of specific examples. Besides shape, vessels in groups also share characteristic manufacturing techniques, as well as techniques of finish and decoration. Such elements may have contributed to the assignment of a particular example to one group instead of another.

### The Layout of the Groups on the Plates

On the pottery plates, the vessels in each group are arranged along the two axes of space and time. Large groups may fill more than one plate ; in such cases continuations to preceding and following plates are indicated by arrows in the lower corners.

Throughout this study the geographical regions where a specific group is attested – the spatial axis – are arranged horizontally in the same order across the bottom : Northern Alluvial Plain, Southern Alluvial Plain, Middle Euphrates, Diyala (Basin), Gulf and Susiana. Pottery from the Alluvial Plain is shown in black, while pottery from peripheral areas is shown in gray. If a region is not represented among the illustrated examples of a specific group, that region’s name is omitted from the plate layout. However, unillustrated examples from a specific region are sometimes known. These are noted in the description of the vessel groups and appear in the *Comparanda* for each group. They are also taken into account on the distribution maps for each group, generally to be found on the lower right side of the plates.

The temporal axis is oriented vertically, with the earliest material toward the bottom. For the first half of the 2nd millennium, dates are given according to the chronological system laid out in *MHEM* 4. In the descriptive text these dates are usually unlabeled ; in a few instances, however, we have used the abbreviation NLC (New Low Chronology) to help prevent misunderstanding. The dates for the latter half of the millennium are in line with the historical chronology proposed by BRINKMAN (1977).

The dates shown on the plates are not arranged to scale. In every case their locations have been determined by the number of illustrated vessels, as well as their size and shape. Where a ves-

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sel is illustrated with *both* a measured drawing and a photograph, only the drawing has been placed with reference to the indicated dates. The position of the accompanying photograph is not meant to have chronological significance. However, in the relatively few cases where photographs or renderings of vessels appear without measured drawings, these have been intentionally positioned in accordance with the dates on the time scale.

Due to limitations of space, vessels that we regard as being essentially contemporary have sometimes had to be placed above and below one another. Therefore, the reader should consult the stratigraphic information provided in the listing that accompanies each plate, as well as the text, in order to determine whether the placement of vessels *within the span of time represented by any two chronological designations* (usually a century) is meant to represent : 1) their general contemporaneity ; 2) their stratigraphic arrangement, based on the internal stratigraphy of a given site and any relevant absolute chronological information ; or 3) both. We do not anticipate that this unavoidable ambiguity, once understood, will create undue confusion.

## Whole Profiles and Sherds

Insofar as possible, we have used whole profiles to illustrate the morphological variation within the vessel groups, as well as their temporal and geographical extent. However, we have also used incomplete profiles – generally rim sherds, but sometimes bases+bodies – where whole profiles are lacking. Sherds are also used to provide additional information concerning the morphological, spatial or temporal range of a group whose features are known from complete shapes. Where a particular shape occurs with more than one kind of base, it is, of course, impossible to be certain whether the rim sherds we illustrate come from vessels with one type of base or another. In such cases, we have tried to deploy the sherds so that they are least likely to lead to erroneous inferences. Nevertheless, the ambiguities attendant on such sherds should be kept in mind.

In a few cases we have identified groups based solely on the evidence of sherds. We have done this only with characteristic – that is, potentially diagnostic – shapes that we believe are necessary to be included in this guide, and moreover, only in cases where more than a few sherds have been attested in the archaeological record.

## Diameters

The diameters of rims have been measured to their outer edges, not to their points of contact with a flat surface.

## Manufacturing Techniques

In "The Babylonian Potter : Environment, Clay and Techniques" below, A. Van As and L. Jacobs discuss how major groups of 2nd-millennium pottery were produced.

They describe three methods used by potters to deal with the tendency of thick vessel bases to crack during the process of drying.[126] These techniques were first recognized at Tell ed-Dēr because the sherds were sawn. In the resulting smooth surfaces the differences in the textures of the coarse-tempered and more finely tempered clays could be seen and drawn (e.g., Pl. 83 : 1-2). All three methods involved clay tempered with coarsely chopped straw, which resisted cracking. In the limited number of cases where they have been identified, the traces of these three methods have been indicated in the pottery drawings with vertical hatching and also have been described briefly under Remarks in the plate legends :

1) *Patched base* refers to a base where existing cracks were repaired or patched with coarsely tempered clay before firing (e.g., Pl. 101 : 3).

2) *Plugged base* refers to the situation where the potter deliberately left a hole in the base that he then filled with a plug of coarsely tempered clay (e.g., Pl. 100 : 7).

3) *Filled-in base* refers to the process by which the potter would add coarsely tempered clay to a hole in the top of the cone (hump) of clay on the wheel, so that as the vessel was thrown, its base came to be filled in with the coarser material (e.g., Pl. 99 : 4).

At Susa some years earlier, it was noticed that the bases of several shapes were plugged because the plugs, made of coarsely tempered clay, occasionally were loose or had fallen out. This led to the identification of plugged bases on vessels with Babylonian affinities at Susa, including goblets and jars.[127]

Relatively few vessels illustrated in this guide have been examined to see how their bases were made. The absence of information about the base on a particular vessel does not mean that it was not manufactured according to one of the above-described methods.

## Maps

Maps showing the geographical distribution of each group appear on the plates. These maps are based on the information provided on the plates themselves in addition to the *Comparanda*, if any, included at the end of the description of each group in this chapter. The maps therefore may show broader geographical ranges than might be inferred on the basis of the vessels illustrated on the plates alone.

On these distribution maps we have dealt with the Babylonian heartland differently from the peripheral regions. In the Babylonian regions of the Northern and Southern Alluvial Plains, we have, with few exceptions, assumed that even if a group is attested at only one or two sites, it is present across the whole region. For example, even if a group is attested only at Tell ed-Dēr, we have highlighted the entire Northern Alluvial Plain.

Along the periphery we have been more circumspect. We have tended to highlight only those sites where a group is attested. Partial exceptions to this rule involve Susa, where if a group is attested at that site, we have highlighted the whole of Susiana, and the Middle Euphrates and the Diyala Basin, where we have highlighted the course of each river as far as the farthest attestation. We have been cautious in the peripheral regions because our information is so limited, and we are hesitant to highlight broad areas given the state of our knowledge. The maps do not show all the peripheral areas mentioned in the *Comparanda*.

On some maps a highlighted site also has a question mark next to it. This means that a *possible* example of the group in question has been identified at the site.

Finally, the maps represent the state of our knowledge at the present time and future investigations will probably change them substantially. Nevertheless, they do reveal interesting patterns and suggest possibilities for future research.

## Synoptic Tables

The synoptic tables (Tables 1-8) present all the groups of pottery in this guide in order according to shape. They serve as a visual table of contents for the guide as a whole. The quickest way to locate a particular group or shape is to consult them first.

The tables provide a snapshot view of the time-range of each group. The tan-colored bars represent northern Babylonia and the green represent southern Babylonia. These bars show the

126 See also VAN AS and JACOBS 1987.

127 GASCHE 1973, 38-39.

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span of time for which we have evidence of a given group. They are obviously not battleship curves. We do not have enough statistical information from both northern and southern Babylonia to provide consistent information about the rise, peak and decline in popularity of a given group.

The peripheral regions have not been shown on the synoptic tables, primarily for reasons of space. Nevertheless, the peripheral regions provide valuable additional information about the time-range and development of some pottery groups.

We have used question marks on the tables principally to indicate two situations :

1) Where the question mark has been placed within a colored bar, it means that the date of the bar is uncertain. This happens most often where the bar represents only one or two attested examples that are themselves of uncertain date.

2) Where the question mark is placed in a gap between bars, it means that we believe the group in question probably occurs in the time period represented by the gap, even though we have no attested examples.

The upper and lower limits of these bars are sharp rather than gradually shaded out. The use of sharp as opposed to shaded limits does not mean that we think that we are absolutely certain of the time spans of our groups and that future researchers will not find examples that are earlier or later than we have indicated. The limits we have shown are the best we could determine based on the existing evidence. New evidence will undoubtedly necessitate changes and adjustments.

Some pottery groups are attested only at a single point in time. In such cases we have arbitrarily assigned the group a time depth of 25 years, a quarter of a century, on the synoptic tables.

## DESCRIPTION OF THE SHAPES

In the paragraphs that follow each family is introduced, and the groups belonging to that family are described in detail. The description is followed by a discussion of the geographical distribution of the particular group; this discussion is based on the vessels illustrated on the plates as well as the *Comparanda*, a list of the published examples of each group arranged by region. The *Comparanda* give an idea of the relative frequency and extent of each group and, together with the illustrated examples, form the basis for the distribution maps found on the plates.

### FAMILY 5

Family 5 includes low and wide open vessels, here called platters. These vessels have the lowest ratio of rim height to maximum vessel diameter in the 2nd-millennium assemblage. Family 5 is restricted in time to the first half of the 2nd millennium and, moreover, represents one of the most characteristic families of the 17th century. The earliest attested group, Group 5 C 1, extends back into the 19th century in the Northern Alluvial Plain. Other groups in Family 5, as well as variations in shape within Group 5 C 1, represent elaborations of the original form over time and space.

#### Group 5 A 1 (Pl. 1 : 1-12)

Group 5 A 1 consists of platters with flat bases and low flaring or vertical sides that terminate in simple rounded rims. The vessels in this group were made by hand of coarse clay ; they were not well finished. All display numerous irregularities in their shapes, and no two cross-sections of a given vessel produce the same profile. Many examples show a slight protrusion of clay on the exterior surface where the side of the vessel had been pushed down onto the edge of the base, so that it would be firmly attached (Pl. 1 : 4, 8-9 and 11). Some have sinuous profiles similar to those of vessels in Group 5 B 1 (Pl. 1 : 5-7 and 10). They have not been included in that group because of their comparative shallowness and their irregular, unfinished appearance ; the vessels in Group 5 B 1 are much better finished than these.

Group 5 A 1 has been attested in both the Northern and Southern Alluvial Plains. However, the southern examples are from the middle of the 17th century, while those from the North date to the 16th century. The reason for the absence of 17th-century examples from the North is not obvious and may be due to accidents of excavation. This group is found in the Middle Tigris Basin at Assur. Similar shapes but slightly smaller in size are also attested in Bahrain, Barbar Temple III.

*COMPARANDA*

*Northern Alluvial Plain*

*Tell ed-Dēr* : besides the vessels illustrated here on Pl. 1, see also : *MHEM* 1, Pl. 25 : 3-5, 8 and 10.

*Middle Tigris Basin*

*Assur* : BEUGER 2005, Katalog 2, Pl. 1 : 13.

*Gulf*

*Barbar (Bahrain)* : ANDERSEN and HØJLUND 2003, figs. 579-582 (sherds).

#### Group 5 B 1 (Pl. 2 : 1-29)

Examples from Group 5 B 1 have a more-or-less sinuous profile and an everted, rounded rim. These characteristics, however, evolve over time. Earlier examples, from the 17th and early 16th centuries, have only a slight sinuosity and are never carinated ; their profiles also tend to be relatively high. Beginning around 1550, the platters in this group generally have more marked sinuosity and/or rim eversion, and are sometimes carinated ; they also tend to have lower profiles. In other words, what began as a high, smoothly sinuous shape in the early 17th century, largely became a low, sharply everted shape by the middle of the 16th century.

Plate 2 : 22 and 24 show the barest hint of an articulation on their inner profiles, putting them at the limit between Groups 5 B 1 and 5 C 1, and providing a morphological link between the two groups in the early 17th century (see Pl. 3 : 21-22). This leads us to believe that Group 5 B 1 began as a northern Babylonian shape variation of Group 5 C 1 in the 17th century. The group evolved along a parallel, but distinct, path from that of Group 5 C 1 through the 16th century.

Group 5 B 1 is amply attested in the Northern Alluvial Plain during the 17th and 16th centuries. Two 17th-century examples are known from the Southern Alluvial Plain, one each from Larsa and Warka (Pl. 2 : 25-26). The relative rarity of Group 5 B 1 in the South indicates that within Babylonia proper this shape was mostly produced in the North.

Group 5 B 1 is also attested in the Middle Euphrates from the late 17th through the first half of the 16th century. However,

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these Middle Euphrates platters, all from the site of Khirbet ed-Diniye (Harrâdum), tend to be taller and correspondingly larger than their counterparts in the alluvial plain. The illustrated examples (Pl. 2 : 27-29) are those closest in shape and size to the Group 5 B 1 platters from northern Babylonia.

*COMPARANDA*

*Northern Alluvial Plain*

*Sippar (Abu Habbah)* : *BaM* 36, Pl. 19 : 2865 and 2881.

*Tell ed-Dēr* : besides the vessels illustrated here on Pl. 2, see also : *MHEM* 1, Pl. 25 : 13, 15-17, 19, 21-23, 30, 32, 35-36, 38 and 40.

## Group 5 C 1 (Pl. 3 : 1 to Pl. 6 : 11)

Members of Group 5 C 1 are characterized principally by their inwardly beveled, usually thickened rims. The rims can be steeply or moderately beveled and can be either short or long. The profiles also vary significantly. Sides are sometimes oriented more-or-less vertically and can be either straight or slightly sinuous ; they can be incurving ; or they can be straight and flaring. Even though at the extremes the vessels in this group look substantially different from one another (for example, compare the different shapes of Pl. 3 : 22, Pl. 3 : 25, Pl. 4 : 10 and Pl. 5 : 9), the group has nevertheless proved to be resistant to easy subdivision. As a result, we have used the rim shape as the defining characteristic and have arranged the profiles on the plates to show the continuum of morphological characteristics found within the resulting group.

There is some correlation – though it is far from absolute – between the length of these platters' rims and their profiles. Longer rims tend to occur with more-or-less straight sides, whether they are vertically oriented and sometimes also *slightly* sinuous (e.g., Pl. 3 : 8, 15 and 18), or flaring (e.g., Pl. 3 : 16 and 25, and Pl. 6 : 1). Short rims, on the other hand, tend to be found on platters with more curved sides (e.g., Pl. 4 : 4, 10, 16 and 18, and Pl. 6 : 4).

The platters of Group 5 C 1 are the earliest to be attested in Babylonia. The oldest fragment of a platter belonging to this group is dated to the latter half of the 19th century ; it comes from Tell ed-Dēr in the Northern Alluvial Plain (Pl. 4 : 20). While there is no reason to doubt the stratigraphic position of this sherd, the earliest platters otherwise appear at Tell ed-Dēr during the first half of the 18th century (Pl. 4 : 17-19). These all have curved sides of medium height.

The platters of Group 5 C 1 continue to be well attested in the North through the 18th, 17th and 16th centuries. Some 16th-century platters retained the same general form as their 18th-century forebears (e.g., Pl. 3 : 4-5 and Pl. 4 : 2). However, in the 17th century the shapes of these platters evolved in several other ways as well. One trajectory resulted in platters like those of Plate 3 : 3, 6, 18 and 22, and led to the sinuous shapes of Group 5 B 1 (Pl. 2). Another trajectory resulted in the taller shapes of Plate 4 : 1, 4, 10, 16 and 18, as well as the high-sided platters with finished bases of Group 5 C 2 (Pl. 7).

The illustrated examples from the Southern Alluvial Plain date to the 17th century. The same differences in shape that are characteristic of the 17th century in the North are also present in the South. Based on sherd frequencies at Nippur, Group 5 C 1 was the most common platter group in the 17th century ; the more limited information available from other sites suggests that this was the case for the South as a whole.

Unpublished sherds probably belonging to Group 5 C 1 have been reported as coming from Level TA XII at Nippur. These sherds could date as early as the 18th century.[128] Otherwise, however, examples of this and other platter groups have not been found in 18th-century levels at southern sites, suggesting that neither Group 5 C 1 nor the other platters were important shapes in the southern ceramic assemblage before the 17th century, that is, the time of Hammurabi and Samsuiluna.

Platters belonging to Group 5 C 1 have been found in the Middle Euphrates in the 17th century. They have also been found in the Diyala Basin in contexts dated to around and just after 1600. An example was recorded at Failaka in the Gulf, while another comes from Nineveh in the Middle Tigris Basin.

*COMPARANDA*

*Northern Alluvial Plain*

*Kish* : DE GENOUILLAC 1925, Pl. XVIII : 5 (first vessel from left and first and second from right).

*Sippar (Abu Habbah)* : AL-JADIR 1987, 203, illustr. 8 : d.
*BaM* 36, Pl. 19 : 2886 and 2887.
*Sumer* 54, Pls. **42** : 1, 16, **59** : 2-4, **61** : 1, 5, 6-13.

*Tell ed-Dēr* : besides the vessels illustrated here on Pls. 3 and 4, see also :
*MHEM* 1, Pl. 25 : 25, 28, 42 and 43.
*TD* 2, Pl. 18 : 11 and 12.

*Southern Alluvial Plain*

*Isin* : besides Pl. 5 : 1 illustrated here, see also : *Isin* 3, Pl. 28 : 12.

*Larsa* : besides Pls. **5** : 5, 11-12 and **6** : 4 and 7 illustrated here, see also :
BACHELOT and CASTEL 1989, fig. 23 : 6.
CALVET 2003, figs. **46** : 27.16 and **69** : 59.64.
CALVET *et al*. 2003, figs. **5** : a, c-d and, from Parrot's 1967 exc., **33** : d to g.
GASCHE in press, Pl. 1 : 3, sherd that probably belongs to Group 5 C 1.

*Nippur* besides the vessels from Nippur illustrated on Pls. 5 and 6, see also :
*OIP* 78, Pl. 82 : 14.

*Warka* : besides Pl. 5 : 4, 9 and 16 illustrated here, see also :
*AUWE* 10, Pls. **15** : *Grab* 31 and **34** : a-c.
VAN ESS 1991a, 94, Pl. 108 : 36.

*Middle Euphrates*

*Mari* : LEBEAU 1987, Pl. 2 : 3, 5.
PONS 1999b, fig. 2 : 3 and 4.

*Terqa* : TASSIGNON 1997, fig. 35 : 2.

*Middle Tigris Basin*

*Nineveh* : MCMAHON 1998, fig. 11 : 11-12 ; first half of 2nd millennium.

*Diyala Basin*

*Tell ed-Dhiba'i* : KHALID K. HAMMOUDI 1989-90, p. 100, central illustr., top right.

*Gulf*

*Failaka* : HØJLUND 1987, fig. 290.

*Qala'at al-Bahrain* : BIBBY 1972, probably Pl. XVII above, platter containing snake offering.

## Group 5 C 2 (Pl. 7 : 1-15)

Group 5 C 2 includes platters with inwardly beveled, thickened rims, curved, sometimes inturned sides and either finished disk bases or low ring bases. The platters of Group 5 C 2 are variants of Group 5 C 1. They most resemble the tall, curved 17th- and 16th-century examples of Group 5 C 1 with which they are contemporary (e.g., Pl. 4 : 1, 4, 10, 16 and 18, and Pl. 6 : 2-4).

Group 5 C 2 is attested in the Northern Alluvial Plain in the 17th and 16th centuries, in the Southern Alluvial Plain in the 17th century, and in the Middle Euphrates region at the end of the 17th century.

*COMPARANDA*

*Southern Alluvial Plain*

*Isin* : besides Pl. 7 : 11 and 12 illustrated here, see also : *Isin* 3, Pl. 28 : 10 and 15.

*Nippur* : besides Pl. 7 : 8-10 and 13 illustrated here, see also :
FRANKE 1978, fig. 59 : 2a.
*OIP* 78, Pl. 93 : 3 and 9. >

128 *OIP* 78, Pl. 88, *sub* No. 1.

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*Middle Euphrates*
*Tell al-'Usiyeh* : SABAH JASIM ABDUL-AMIR 1988, fig. 90 : 3.

## Group 5 D 1 (Pl. 8 : 1-24)

Group 5 D 1 represents a variant of the basic platter group, Group 5 C 1. It shares many of the shape characteristics of Group 5 C 1, except that it has a horizontal, usually thickened rim.

Group 5 D 1 is first attested in the Northern Alluvial Plain at the end of the 18th century and continues until the latter half of the 16th century. It is attested in southern Babylonia, the Middle Euphrates, and the Upper Diyala Basin in the 17th century. Beyond the principal regions included in this study, Group 5 D 1 has also been found in the northern Levant and in the Habur Basin.

*COMPARANDA*

*Northern Alluvial Plain*
*Sippar (Abu Habbah)* : *Sumer* 54, Pls. **58** : 17-18, **59** : 6-7, **61** : 2-4.
*Tell ed-Dēr* : besides Pls. 8 : 1-15 illustrated here, see also : SALLABERGER 1996, Pl. 1 : 4.

*Southern Alluvial Plain*
*Isin* : *Isin* 3, Pl. 28 : 17 (ø rim : 500 mm).
*Isin* 4, Pl. 55 : 11.
*Larsa* : CALVET 2003, figs. **66** : 59.114 (close to our Pl. 8 : 14 and 23) and **66** : 59.116.
CALVET *et al*. 2003, fig. 7 : b, c, d and e.
GASCHE in press, Pl. 1 : 5-9, sherds that probably belong to Group 5 D 1.

*Levant*
*Tell Atchana* : WOOLLEY 1955, Pl. 109 : 6b.

*Habur Basin*
*Tell Leilan* : WEISS *et al*. 1990, figs. **21** : 2 and **27** : 11.

*Middle Euphrates*
*Mari* : LEBEAU 1983, fig. 1 : 5-6.
*Id*. 1987, Pl. 2 : 1-2, 4 and 6-13.
PONS 1999b, fig. 2 : 1 and 2.
*Tell Mohasan* : GEYER and MONCHAMBERT 1987, fig. 12 : 9-11.
*Tell al-'Usiyeh* : AGHA 1987-88, 139, fig. 36 : 44.

## Group 5 D 2 (Pl. 9 : 1-7)

Group 5 D 2 consists of platters with horizontal, thickened rims, curved sides and either ring or finished disk bases. Some examples (Pl. 9 : 1, 5 and 7) have a horizontal groove below the rim. The finished bases distinguish this group from the preceding Group 5 D 1.

This small group is attested in the Northern Alluvial Plain during the 17th and 16th centuries and in the Southern Alluvial Plain during the 17th century. Examples have also been reported in the Middle Euphrates and the Gulf.

*COMPARANDA*

*Middle Euphrates*
*Harrâdum* : SABAH JASIM ABDUL-AMIR 1988, fig. 93 : 4.
*Tell al-'Usiyeh* : AGHA 1987-88, 139, fig. 36 : 43 and 45.

*Gulf*
*Failaka* : HØJLUND 1987, fig. 291.

## Group 5 E 1 (Pl. 9 : 8-12)

Group 5 E 1 includes platters with simple, rounded rims, curved, sometimes inturned sides and unfinished bases. A horizontal groove just below the rim is characteristic.

Platters belonging to Group 5 E 1 are attested only in the Southern Alluvial Plain during the 17th century.

*COMPARANDA*

*Southern Alluvial Plain*
*Larsa* : CALVET *et al*. 2003, fig. 8 : d and e.

## Group 5 E 2 (Pl. 9 : 13-16)

Group 5 E 2 includes platters with simple, more-or-less rounded rims, deeply curved, sometimes inturned sides and ring or finished disk bases. They usually have a horizontal groove below the rim.

A single example from the Northern Alluvial Plain dates to the end of the 17th century. It looks atypical in comparison with the other illustrated members of this group ; however, its inturned profile is also present on Plate 9 : 9-10, both members of Group 5 E 1, which has the same overall shape as Group 5 E 2 but with an unfinished base. Group 5 E 2, like Group 5 E 1 above, is predominantly a 17th-century southern form.

*COMPARANDA*

*Southern Alluvial Plain*
*Larsa* : BACHELOT and CASTEL 1989, possibly fig. 22 : 1.

# FAMILY 10

Family 10 consists principally of straight-sided open vessels, so-called simple bowls. They are of small to medium size and have several different rim shapes, and string-cut or ring bases. Also included in Family 10 are larger, thick-walled, flat-bottomed open vessels, here referred to as basins (Groups 10 I 1 and 10 J 1).

## Group 10 A 1 (Pl. 10 : 1 to Pl. 12 : 15)

The bowls of Group 10 A 1 have straight sides, rounded rims and string-cut bases. They are often carelessly made and indifferently finished. The descriptor "straight-sided" is interpreted loosely. Several slightly convex-sided examples included here (e.g., Pl. 10 : 23-24 and Pl. 11 : 21-23) approach the limit between this group and the small, curved-sided bowls (Group 15 A 1). The profiles of other group members are somewhat concave (e.g., Pl. 10 : 7, 9 and 11, Pl. 11 : 5 and Pl. 12 : 7).

We have referred to this shape as a bowl, but it was certainly employed for more than a single purpose. THALMANN (2003, 50) reports on the frequent use of such vessels as lamps during Early Dynastic III, based on the traces of burning found in them. Smaller examples, in particular, were sometimes used as lids.

Several of the later examples, which date to the Kassite Period, have filled-in bases (Pl. 10 : 1-3 and 7). This means that the potter was trying to prevent the bases from cracking during drying. This method is frequently seen on narrow closed shapes such as goblets (e.g., Pl. 101 : 5-6 and 9) and cups (e.g., Pl. 96 : 10-13) during the Kassite Period, but here we can see that it was used at that time on open forms as well (see also Pl. 15 : 3 [Group 10 C 1] and Pl. 36 : 2-4, 8, 12, 14-15 and 17 [Group 20 H 1]).

These bowls are found in the Southern Alluvial Plain between the 20th and 16th centuries (Ur III-Late Old Babylonian Periods), but the roots of the group are deeply anchored in the 3rd millennium.[129] The bowls decrease in size between the 20th and 18th centuries from 20 or more cm in diameter to between about 12 and 18 cm. At the same time their relative numbers increase (Pls. 10 and 11). This shape is attested in Tell ed-Dēr (Northern Alluvial Plain) only after the beginning of the 18th century, in the middle of the Isin-Larsa Period (Pl. 10). This raises questions about the significance of the presence of the shape in adjacent northern peripheral areas (see below) in the 20th century, but it should be stressed that the Ur III levels excavated in Tell

[129] For Nippur, see MCMAHON (2006, Pl. 76 [Akkadian to Ur III]) and for Larsa THALMANN (2003, figs. 27 to 30 : 2-8 [ED IIIa - possible Early Akkadian]). For the Diyala, see *OIP* 63, Pl. 146 : B.001.200a and for Susa *MDP* 46, Pls. 5 : 1-4 [Late Akkadian], 11 : 1-2 [Early Akkadian], 13 : 1-2 [Late ED III] and 19 : 1, 5 [ED III]).

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ed-Dēr are small. Early 2nd-millennium examples have been identified both in the Middle Euphrates and the Diyala Basin. They are attested in the Diyala and Susiana in the 19th century, and then in Susa in the 16th century, after a gap of about 300 years.[130]

The somewhat larger straight-sided bowls of the Kassite Period have been attested in both the Northern and Southern Alluvial Plains, as well as in the Diyala Basin and the Gulf.[131] All these examples come from the 13th century or later. Sherds from 13th-century bowls belonging to this group have also been recovered at Mari in the Middle Euphrates region.[132]

In Susiana Group 10 A$_1$ is present in the 15th century and continues to be attested down into the 11th century. The dearth of examples from the 14th century and earlier in Babylonia and other regions is due primarily to the lack of excavation of earlier Kassite contexts and/or the inadequate recording of the pottery from such contexts.

There is a discernable size difference between the small bowls from the Isin-Larsa and Old Babylonian Periods and the somewhat larger Kassite examples. Based on the attestations from Susa, where Group 10 A$_1$ bowls have been recovered from Levels A XII *récent* (Pl. 12 : 12) and A XI *ancien*, (Pl. 12 : 11), as well as Levels 13 to 10 of *Ville Royale* II (Pl. 12 : 8-10),[133] it appears that the smaller-sized bowl of the earlier periods continued to be made there during the second half of the 2nd millennium. Because there are no attested Babylonian examples of either size in the 15th century, it is not certain when the larger bowls of the Kassite Period first began to be made. During Kassite times the uses to which the small Old Babylonian bowls of Group 10 A$_1$ were put were likely assumed by the similarly sized wavy-sided (or carinated) bowls of Group 20 H$_1$ (Pls. 36-37) .

*COMPARANDA*

*Northern Alluvial Plain*

*'Aqar Qūf* : TAHA BAQIR 1945, Pl. 23 : Level IV.
*Sippar (Abu Habbah)* : *BaM* 36, Pl. 19 : 210 and 2853.
*Sumer* 54, Pls. **58** : 2, 8, 10-12, **62** : 15, 19, 25-26 and probably **63** : 5-8 (10 A$_1$ or $_2$) and 14.
*Tell Abu Shijar (near 'Aqar Qūf)* : JASIM *et al*. 2006, fig. 9 : 1.
*Tell ed-Dēr* : besides the bowls illustrated here on Pl. 10, see also :
GASCHE 1991, fig. 5 : 2.
*MHEM* 1, Pl. 26 : 3-4 and 6-8.
*NAPR* 6, Pl. 9 : 1 and 2.

*Southern Alluvial Plain*

*Isin* : *Isin* 1, Pl. 27 : IB 241a-b and 454.
*Isin* 3, Pls. **30** : 16-17 and **31** : 8 (IB 1571b).
*Larsa* : besides Pl. 11 : 13-18 illustrated here, see also :
ARNAUD *et al*. 1979, 8, fig. 64.
CALVET 2003, figs. **63** : 59.147, **66** : 59.53 and **69** : 59.65.
CALVET *et al*. 2003, fig. 6 : a, b, f, g, h, p and q.
GASCHE in press, Pl. 1 : 23.
See also THALMANN 2003, 50 for the use of this shape as lamps during ED III.
*Mashkan-shapir* : STONE and ZIMANSKY 2004, fig. 50 : AbD 87-52.
*Nippur* : besides the bowls of Nippur illustrated on Pl. 11, see also :
FRANKE 1978, figs. **59** : 1a and **62** : 4.
*OIC* 22, figs. **44** : 020137 and **70** : 8 (fine ware).
*OIP* 78, Pls. **82** : 15, **88** : 5 and **97** : 7, 11-12.
*OIP* 111, Pls. **75** : b-e, **76** : a-m and 77 : a-f.
*OIP* 129, Pl. 79 : 1-20 (Akkadian-Ur III).
*Tell Laham* : FUAD SAFAR 1949, Pl. IV : 7.
*Tell al-Wilaya* : HUSSEIN *et al*. 2009, fig. 19 : h, j, k and m ; see p. 22 for chronological information.
TARIQ MADHLUM 1960, fig. 3 : 16-18.
*Warka* : *AUWE* 1, Pls. **31** : 156-157, 165, 172, **58** : 157 (photo), **81** : 1, and **82** : 51.
*AUWE* 10, Pls. **5** : *Grab* 10b, **14** : *Grab* 24, **16** : f, **20** : c, **23** : c, **28** : c and **29** : k-l.
FINKBEINER 1985, fig. 20 : 37-39.
VAN ESS 1988b, figs. **4** : 15, **5** : 16, 6 : 27, **7** : 32, and **8** : 37.
VAN ESS 1993, figs. **9** : 131-132, 135-136, 138, 144, **12** : 161, **13** : 165, 167 and **16** : 187-188.

*Middle Euphrates*

*Mari* : besides Pl. 12 : 1 illustrated here, see also :
PONS 1999b, fig. 3 : 1-3.
PONS and GASCHE 1996, fig. 1 : 1-2 (Kassite).
*Tell al-'Usiyeh* : FUJII *et al*., 1984-85, fig. 6 : 24.

*Diyala Basin*

*Ishchali* : *OIP* 63, Pl. 146 : B.001.200a.
*Tell al-Zawiyah* : NADIR AL-RAWI 1979, fig. 24, bottom left (photo).
*Tell Haddad* : BURHAN SHAKIR SULAIMAN 2003-04, 105, fig. 2 : 282 and 305.
*Tell Imlihiye* : BOEHMER and DÄMMER 1985, Pls. **28** : 20-33 (drawings) and **56** : 20 and 32 (photos).
*Tell Suleimah* : GHASSAN 1995, Pls. **143** : 522 and **144** : 533.
*Tell Zubeidi* : besides Pl. 12 : 3 illustrated here, see also :
BOEHMER and DÄMMER 1985, Pls. **114** : 138-143 and 145-151 (drawings) and **136** : 142A.

*Gulf*

*Bahrain Cemeteries* : DENTON 1994, fig. 4 : IA.
*Failaka* : besides Pl. 12 : 6-7 illustrated here, see also :
HØJLUND 1987, figs. 305, 306, 309 and 310.
PIC 2008, fig. 19 : 112 and probably 113.
*Khor Ile-Sud (Qatar)* : EDENS 1999, fig. 7 : 1-3 (with potter's mark) and 5-6 (all Late Kassite).
*Qala'at al-Bahrain* : BIBBY 1972, fig. on p. 142, No. 19, and Pl. XVI below : center.
HØJLUND and ANDERSEN 1994, figs. 264, 447, 486, 534 and 576 (sherds which could belong to Groups 10 A$_1$ or 10 A$_2$).
*Ib*., figs. 741, 742, 743 and 745 (Kassite).

*Susiana*

*Haft Tepe* : NEGAHBAN 1991, fig. 10 : 115-121.
*Susa* : besides Pl. 12 : 8-15 illustrated here, see also :
*MDP* 46, Pl. 4 : 18 (Ur III).
*MDP* 47, Pl. 1 : 1-5, 7-9, 11-12 and 15-16.
CARTER 1980, figs. **33** : 4 and **34** : 2-3 (Ur III).[134]
DE MIROSCHEDJI 1981, figs. **10** : 2 (late 14th-early 13th century) and **11** : 2, 4 and the larger sized bowls 5 and 7 (all late 13th-11th c.).
*Tchogha Zanbil* : *MDP* 39, Pls. **67** : G.T.-Z. 322-323 and **95** : G.T.-Z. 10 and 54 (second half 14th c.).
*MDP* 40, Pls. **89** : G.T.-Z. 735, **91** : G.T.-Z. 987 and **99** : G.T.-Z. 1133 (second half 14th c.).
PONS 1991, Pl. 1 : 4 (Exc. de Mecquenem).

## Group 10 A$_2$ (Pl. 12 : 16 to Pl. 13 : 3)

These small straight-sided bowls with simple rounded rims have ring bases. They are generally better finished than their counterparts with string-cut bases in Group 10 A$_1$. A few 17th-century examples bear the linear or geometric decoration in black paint that frequently appears on both open and closed shapes during that century (Pl. 12 : 18 and Pl. 13 : 1).

Dating to the 18th and 17th centuries, these vessels have been found in both the Northern and Southern Alluvial Plains. However, on present evidence ring bases occur less frequently in the

130 *MDP* 47, Pl. 1 and Pl. 12 : 8-15 illustrated here.

131 HØJLUND (1987, figs. 307-308, and pp. 109 and 159) has assigned the bowls from Failaka (our Pl. 12 : 6-7) to the 15th and 14th centuries (Period 4A-B), somewhat earlier in the Kassite Period than we do. We have placed them in the latter part of the 13th century and consider them to be typically Late Kassite.

132 PONS and GASCHE 1996, 291, fig. 1 : 1-2.

133 Sounding DE MIROSCHEDJI 1981 ; see also fig. 17 for 9th-8th c. examples which are still produced after the 10th c. gap observed in this operation.

134 E. Carter assigns these bowls to her Period IV B with a question mark. For the position of Period IV B in the sequence of 'Ville Royale I', see p. 35 of her article and STEVE *et al*. 2002-03, Tableau 2b, but these bowls and the other items found with them fit well in a late Ur III or a very early Isin-Larsa context.

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South than in the North. Examples are rarely attested in the peripheral regions.[135]

*COMPARANDA*

*Northern Alluvial Plain*

*Tell ed-Dēr* : besides Pl. 12 : 16-23 illustrated here, see also : *TD* 1, Pl. 11 : 4.

*Southern Alluvial Plain*

*Larsa* : besides Pl. 13 : 3 illustrated here, see also : CALVET *et al*. 2003, fig. 6 : l, n and t.

*Nippur* : *OIP* 78, Pl. 93 : 2.

*Diyala Basin*

*Tell Halawa* : GHASSAN 1995, Pl. 103 : 287.

*Gulf*

*Qala'at al-Bahrain* : HØJLUND and ANDERSEN 1994, figs. 264, 447, 486, 534 and 576 (sherds which could belong to Groups 10 A 1 or 10 A 2).

## Group 10 B 1 (Pl. 13 : 4-13)

Like Group 10 A 1, the vessels of Group 10 B 1 have straight, flaring sides, simple rims and string-cut bases. However, their profiles are consistently taller, and they are relatively narrower in relation to their height. Earlier examples show a faint line of articulation near the base where the profile turns upward slightly (Pl. 13 : 8-10). The vessels of this group are close in shape to members of Group 15 B 1 (especially Pl. 24 : 9), and these two relatively small groups may together represent a continuum of shapes, particularly in the 16th century. With their tall sides these vessels were perhaps meant to hold liquids ; they are sometimes called cups.

Vessels of Group 10 B 1 are attested infrequently in northern and southern Babylonia from the latter half of the 17th century. During the following century, examples from the Northern Alluvial Plain become increasingly taller (Pl. 13 : 4-7). Group 10 B 1 occurs only rarely in the Middle Euphrates and the Diyala Basin, just before and after 1600, respectively. The two illustrated vessels from Susa (Pl. 13 : 12-13) date to the 15th century. They appear in Susiana at about the same time as several distinctively Babylonian shapes (Early Kassite examples of Group 210 A 2 [Pl. 96 : 8], Group 210 B 2 [Pl. 97 : 15] and Group 215 A 2 [Pl. 100 : 6-7]), and Babylonian techniques for making pottery (GASCHE 2013).

*COMPARANDA*

*Northern Alluvial Plain*

*Sippar (Abu Habbah)* : AL-JADIR 1987, 198, illustrations **34** (photo) and **35** (drawings).
*BaM* 36, Pl. 20 : 2831.
*Sumer* 54, Pls. **60** : 1-5 and probably **63** : 9-11, 13 (10 B 1 or 2).

*Tell ed-Dēr* : besides Pl. 13 : 4-8 illustrated here, see also : *MHEM* 1, Pl. 26 : 14-21 and 23-28.
*TD* 1, Pl. 11 : 6.

*Southern Alluvial Plain*

*Larsa* : GASCHE in press, probably Pl. 1 : 29, but the sherd from Larsa is slightly older than the oldest example of Group 10 B 1.

*Susiana*

*Haft Tepe* : NEGAHBAN 1991, figs. **10** : 111, 113 and **11** : 123, 124, 127 and 130.

## Group 10 B 2 (Pl. 14 : 1-11)

Group 10 B 2 shares the essential characteristics of Group 10 B 1 – straight, flaring sides, a simple rounded rim, and a relatively narrow profile – with the addition of a low ring base.

Examples of Group 10 B 2 are attested before the middle of the 17th century in both southern and northern Babylonia, and the group continues to be produced in the North until the late 16th century. Seventeenth-century examples were occasionally decorated with the characteristic Old Babylonian geometric designs in black paint (Pl. 14 : 6). During the course of the 16th century, examples become significantly taller in northern Babylonia (Pl. 14 : 1-3). The same development between the 17th and 16th centuries may be seen in the Middle Euphrates region, although the change is less extreme (Pl. 14 : 8-10). This group is also attested in the Diyala Basin at the beginning of the 16th century.

*COMPARANDA*

*Northern Alluvial Plain*

*Sippar (Abu Habbah)* : *BaM* 36, Pl. 20 : 164 (?) and 2794.
*Sumer* 54, Pl. 63 : 15 and probably 12 (10 B 1 or 10 B 2).

*Tell ed-Dēr* : besides Pl. 14 : 1-5 illustrated here, see also : *MHEM* 1, Pl. 27 : 18.

*Southern Alluvial Plain*

*Isin* : besides Pl. 14 : 6 illustrated here, see also : *Isin* 2, Pl. 34 : IB 848d.

*Larsa* : GASCHE in press, perhaps Pl. 1 : 30, sherd that probably belongs to Group 10 B 2.

*Middle Euphrates*

*Tell al-'Usiyeh* : FUJII *et al*., 1984-85, fig. 6 : 23.

## Group 10 C 1 (Pl. 15 : 1-25)

The vessels of Group 10 C 1 typically have straight, flaring sides. They have more-or-less articulated rims that are sometimes, but not always, thickened. The inward bevel of the rim is characteristic. Bases are string cut. These bowls are essentially similar to the those of Group 10 A 1, except for the shape of their rims. Among the early 2nd-millennium examples, the rims are generally well set off, forming a distinct ledge or shelf around the mouth of the bowl. The rim is sometimes everted, particularly among examples from the Northern Alluvial Plain (e.g., Pl. 15 : 4, 6-7 and 10).

The rims on the examples from the Kassite Period are less clearly articulated than on the earlier examples ; the inclusion in this group of some examples, Plate 15 : 1 and 14, in particular, is debatable. They are certainly at the limit between Groups 10 C 1 and 10 A 1. Plate 10 : 3 shows a filled-in base, evidence that the potter was addressing the problem of thick bases, which were typical on bowls in the Kassite Period and which tended to crack during drying.

The bowls of Group 10 C 1 are attested in the 18th and 17th centuries, in both the Northern and Southern Alluvial Plains. The bowls continued to be produced in northern Babylonia in the 16th century. The group is also attested in the Middle Euphrates, the Diyala Basin, the Gulf and Susiana.

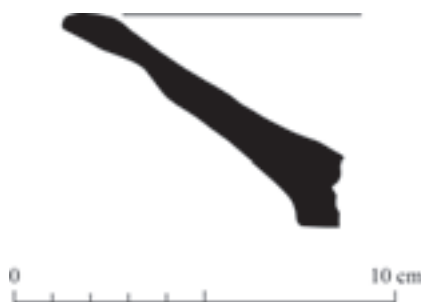


Fig. 1. Sherd of a medium-sized Early Kassite bowl from Group 10 C 1. Tell ed-Dēr : 109512*, E 3, Phase Ib, 2.5YR 8/2, ø rim : -. *NAPR* 6, Pl. 7 : 2.

135 A group of ring-based bowls from Yelkhi in the Hamrin have significantly thinner walls and are more finely made than the Babylonian vessels in Group 10 A 2 (GABUTTI 2002-03, Pl. 27 : 1-13). They are different enough to be considered as not belonging to the Babylonian ceramic tradition.

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Kassite examples are attested in the 13th century in northern and southern Babylonia, around 1200 in the Diyala, and in Western Iran, as well. As is also the case with Group 10 A$_1$, these bowls are consistently larger than those from the first half of the 2nd millennium. Because of the relative paucity of material attributable to the 15th and 14th centuries, there is little to connect the 13th century shapes with those of the 16th century. Figure 1, from an early 14th-century context at Tell ed-Dēr and therefore Early Kassite, arguably represents a link between the two periods. Figure 1 fits well with the other Kassite sherds of Group 10 C$_1$, but unlike them is about the same size as the earlier Old Babylonian shapes.

*COMPARANDA*

*Northern Alluvial Plain*

*Sippar (Abu Habbah)* : *Sumer* 54, Pl. 62 : 13.
*Tell ed-Dēr* : besides Pl. 15 illustrated here, see also : *NAPR* 6, Pl. 9 : 11 to 13 and perhaps 14.

*Southern Alluvial Plain*

*Isin* : besides Pl. 15 : 15 and 16 illustrated here, see also : *Isin* 3, Pl. 28 : 6.
*Nippur* : besides Pl. 15 : 14 illustrated here, see also : *OIP* 111, Pl. 75 : a and f-g.
*Warka* : besides Pl. 15 : 19 illustrated here, see also : *AUWE* 10, Pl. 13 : c.

*Middle Euphrates*

*Mari* : LEBEAU 1987, Pl. 1 : 3 and probably 8-9 and 11-15.
*Terqa* : TASSIGNON 1997, fig. 35 : 6.

*Gulf*

*Qala'at al-Bahrain* : HØJLUND and ANDERSEN 1994, probably figs. 206, 707 and 708.

*Western Iran*

*Tepe Guran* : THRANE 2001, Pls. 32 : 3 = PONS and GASCHE 2006, fig. 1 : 2. Similar to our fig. 1.

## Group 10 C$_2$ (Pl. 16 : 1-4)

The straight-sided bowls of Group 10 C$_2$, with thickened, inwardly beveled rims and ring bases, have been reported only at Tell ed-Dēr in the Northern Alluvial Plain. They have been found in contexts dating between the late 19th and mid-17th centuries. The two earlier illustrated vessels (Pl. 16 : 3-4) have substantially thicker walls than the two later ones (Pl. 16 : 1-2) ; the significance of this is uncertain because there are so few examples.

## Group 10 D$_{1\,\&\,2}$ (Pl. 16 : 5 to Pl. 17 : 6)

Group 10 D$_{1\,\&\,2}$ includes small bowls with straight, flaring sides and thickened, horizontal rims. Because so few complete profiles belonging to this group have been recovered, both string-cut and ring bases have been shown together on the plates, along with a number of sherds illustrating variations in rim shape.

Both string-cut (Pl. 16 : 5-7 and 10) and ring bases (Pl. 16 : 14 and 23) are present in the Northern Alluvial Plain. However, in the Southern Alluvial Plain only string-cut bases have been attested. In this respect, Group 10 D$_{1\,\&\,2}$ follows the general pattern of the similarly shaped Groups 10 A$_1$ and 10 A$_2$, Groups 10 C$_1$ and 10 C$_2$ and Group 10 F$_{1\,\&\,2}$ : both string-cut and ring bases are found in the North, while in the South string-cut bases are typical, and ring bases are rare to non-existent.

Group 10 D$_{1\,\&\,2}$ is attested in the Northern Alluvial Plain from the middle of the 19th century until the latter half of the 16th century. In the Southern Alluvial Plain, however, examples are dated only to the 17th century. Peripheral regions are not well represented among the vessels of this group, but examples are known in the Diyala Basin and in Susiana.

*COMPARANDA*

*Northern Alluvial Plain*

*Abu Qubur* : DE MEYER and GASCHE 1986, fig. 9 : 4.
*Sippar (Abu Habbah)* : *Sumer* 54, Pl. 62 : 14.
*Tell ed-Dēr* : besides Pl. 16 : 5-26 illustrated here, see also : GASCHE 1991, fig. 7 : 6. All sherds were found in a late 14th-13th century context, but their shapes are close to our Pl. 16 : 6 (Late OB) ; therefore, they could be inherited from the underlying Late Old Babylonian layer.
*NAPR* 6, Pls. **7** : 2 and **8** : 4-6.
*TD* 4, Pl. 15 : 4 and 7.

*Southern Alluvial Plain*

*Larsa* : besides Pl. 17 : 2 illustrated here, see also : CALVET *et al*. 2003, fig. 7 : h, k, l and m.

*Diyala Basin*

*Tell Bakr Awa (Shahrizor Plain)* : MUHAMMAD BAKIR AL-HUSAINI 1962, Table 6 : 14 and 18 (close to our Pl. 16 : 10).
*Tell Halawa* : GHASSAN 1995, Pl. 105 : 294.

*Susiana*

*Susa* : *MDP* 47, Pl. 1 : 21 (close to our Pl. 16 : 10).

## Group 10 E$_1$ (Pl. 17 : 7-9)

Group 10 E$_1$ is a small group of straight-sided bowls with string-cut bases and small outwardly thickened and beveled rims.

This group apparently has its roots in the late Early Dynastic Period.[136] During the Akkadian Period,[137] Group 10 E$_1$ is well attested in Nippur, Umm al-Hafriyat and Umm el-Jīr, and it continues to be produced in the Ur III Period (20th c.) at Nippur in the Southern Alluvial Plain (Pl. 17 : 8-9). A possible later bowl of Group 10 E$_1$ was found in a context dated to around 1800 at Umm al-Hafriyat (Pl. 17 : 7).

*COMPARANDA*

*Southern Alluvial Plain*

*Nippur* : besides Pl. 17 : 8-9 illustrated here, see also : *OIP* 129, Pl. 85 : 1-3, 5-6 and 8 (Late Akkadian-Ur III).

## Group 10 F$_{1\,\&\,2}$ (Pl. 17 : 10-19)

Group 10 F$_{1\,\&\,2}$ includes small bowls with straight, flaring sides and thickened, outwardly beveled rims. Because so few complete profiles belonging to this group have been recovered, both string-cut and ring bases have been shown together, along with sherds illustrating variations in rim shape. As is the case with the morphologically similar Groups 10 C$_1$ and 10 C$_2$ and Group 10 D$_{1\,\&\,2}$, both ring (Pl. 17 : 10, 12 and 14) and string-cut (Pl. 17 : 13) bases have been found in the Northern Alluvial Plain.

Group 10 F$_{1\,\&\,2}$ was produced in northern Babylonia from the latter part of the 19th century until roughly the middle of the 18th. It is less common in the South. Examples with string-cut bases from the peripheral site of Yelkhi in the Diyala Basin date to the middle decades of the 18th century. This group is also attested in the Middle Euphrates.

*COMPARANDA*

*Northern Alluvial Plain*

*Tell ed-Dēr* : besides Pl. 17 : 10-16 illustrated here, see also : *TD* 4, Pls. **13** : 5 and probably **18** : 6.

*Southern Alluvial Plain*

*Larsa* : CALVET *et al*. 2003, fig. 7 : a.

*Middle Euphrates*

*Mari* : PONS 1999a, Pl. 13 : 2.
PONS 1999b, fig. 5 : 1 = *id*. 1999a, Pl. 13 : 3.
*Terqa* : TASSIGNON 1997, fig. 34 : 4, 5 and 9-10.

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136 See BAHRANI 1989, Pl. 1 : 3 (al-Hiba).

137 See the references in *OIP* 129, Pl. 84.

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## Group 10 G (Pl. 18 : 1-9)

Group 10 G consists of sherds of a small bowl with a flaring side that is sometimes straight but often is characterized by a shallow concavity below the rim (e.g., Pl. 18 : 2-5 and 7-8). The rim is usually sharply turned inward, thickened and outwardly beveled. However, the rims of the small group of southern examples dating to around 1700 are smaller than the rims of the northern examples. They are rolled inward and rounded (Pl. 18 : 6-8). Arguably these later southern sherds may constitute a separate group.

No complete profiles have been found, so the base type is unknown. The limit between this group and the very similar preceding Group 10 F $_{1 \& 2}$ is difficult to define because of the relatively small number of examples in both groups.

In northern Babylonia, Group 10 G is attested from the end of the 19th century to the end of the 18th. The southern examples fall into two sets, one dating to the latter part of the 19th century and the other to somewhat later in the Isin-Larsa Period. The group is also attested in the Diyala Basin. Comparisons with contemporaneous bowls of Group 10 G found at Tell Mardikh (see *Comparanda*) are based on shape alone and are not intended to imply that the Mardikh bowls belong to the Babylonian tradition, all the more so since the group is not attested in the Middle Euphrates.

*COMPARANDA*

*Northern Alluvial Plain*

*Tell ed-Dēr* : besides Pl. 18 : 1-5 illustrated here, see also : *TD* 4, Pl. 15 : 6.

*Southern Alluvial Plain*

*Larsa* : GASCHE in press, Pl. 2 : 54-57, sherds that probably belong to Group 10 G.

*Central Syria*

*Tell Mardikh* : MATTHIAE 1980, fig. 34 : upper line, center and left.

*Diyala Basin*

*Tell Muhammad* : AMEL METAB 1989-90, 152, fig. 11 : 1 (close to our Pl. 18 : 1).

## Group 10 H $_2$ (Pl. 18 : 10-13)

Group 10 H $_2$ comprises medium-sized open vessels characterized by thick, straight, flaring sides ; a thickened, outwardly beveled rim ; and a thick base, shaped into a low, wide pedestal.[138]

Though not common, Group 10 H $_2$ with its distinctive base has been found in Tell ed-Dēr and Nippur in 17th-century contexts.

## Group 10 I $_1$ (Pl. 19 : 1-5)

Group 10 I $_1$ includes round, handmade, thick-walled basins, sometimes referred to as feeders, with straight, slightly flaring or vertical sides ; thickened, horizontal rims ; and flat, unfinished bases. Examples come from the Northern and Southern Alluvial Plains and from the Diyala Basin and Susiana to the east and mostly can be attributed to the 17th century. A few examples from Nippur are earlier, dating to the 20th or 19th century. The apparent chronological gap in attestation is probably due to the fact that this large, crude shape has not always been adequately recorded in excavations. This group represents a variant of the succeeding Group 10 J $_1$.

*COMPARANDA*

*Southern Alluvial Plain*

*Nippur* : besides Pl. 19 : 2-3 illustrated here, see also : *OIP* 129, Pl. 81 : 4 (Ur III).

## Group 10 J $_1$ (Pl. 20 : 1 to Pl. 21 : 5)

Group 10 J $_1$ consists of round, handmade, thick-walled basins with straight, flaring sides ; thickened,[139] outwardly beveled rims ; and flat, unfinished bases. This group includes the majority of the basins.

In the Southern Alluvial Plain these basins were produced between the 19th and 17th centuries. In the Northern Alluvial Plain they have been found in 17th- to 16th-century contexts. They date to the 17th century in the Diyala and to the early 16th century in the Middle Euphrates.

*COMPARANDA*

*Northern Alluvial Plain*

*Sippar (Abu Habbah)* : *Sumer* 54, probably Pl. 60 : 10.

*Tell ed-Dēr* : besides Pl. 20 : 1-5 illustrated here, see also : *TD* 1, Pl. 14 : 5.

*Southern Alluvial Plain*

*Mashkan-shapir* : STONE and ZIMANSKY 2004, fig. 50 : Lot # 3791.

*Nippur* : besides Pl. 20 : 7-11 illustrated here, see also : *OIP* 78, Pl. 93 : 14.

## FAMILY 15

Family 15 consists of open vessels with curved sides, including simple bowls of small to medium size. Also belonging to Family 15 are several groups of larger open vessels, usually, though not always, having a convex base (Groups 15 F $_3$, 15 G $_3$, 15 H $_1$, 15 H $_2$ and 15 H $_3$). These vessels were commonly used to contain or cover the body in infant ("bowl") burials.

## Group 15 A $_1$ (Pl. 22 : 1 to Pl. 23 : 3)

Group 15 A $_1$ represents small-to-medium-sized bowls with curved sides, simple, rounded rims and string-cut bases. A few examples have decoration at their rims, either a horizontal groove (Pl. 22 : 10) or a painted line (Pl. 22 : 9). The group includes bowls with both shallower and deeper profiles. Bowls with slightly curved sides (e.g., Pl. 22 : 18) are near the limit between this group and Group 10 A $_1$ (Pl. 10 : 1 to Pl. 12 : 15). As the photograph of Plate 22 : 11 indicates, the examples from Nippur, at least, were generally rather carelessly made and finished. They are frequently lopsided and irregular ; their sides may have been pushed in, apparently inadvertently, and left to be fired that way (Pl. 22 : 12 and 17).

Group 15 A $_1$ is found in 18th- and 17th-century contexts in the Northern Alluvial Plain. In the South examples cluster in the 17th century. The group is also attested much less frequently in the 18th and 19th centuries. A similar situation exists with Group 15 A $_2$, the ring-based variant of the same shape, to be introduced below. In that case also small curved-sided bowls are found only in the 17th century at southern sites. The paucity of sherds belonging to curved-sided bowls from 18th- and 19th-century contexts at the southern sites of Nippur and Umm al-Hafriyat reinforces the conclusion that these bowls were not a significant part of the southern ceramic tradition before the time of Hammurabi and Samsuiluna.

These bowls are found the Middle Euphrates during the early 16th century. Plate 23 : 1 is large for this group, but two large

138 In the description of the pottery type to which the Nippur examples were assigned in their original publication – Type 24 – they are described as usually having a string-cut base (*OIP* 78, Pl. 93, 12-14). Shapes substantially different from our Group 10 H $_2$ were included in the Nippur Type 24, so these string-cut bases may not have been on the vessels that we have placed in our Group 10 H $_2$. In any case, however, the bases of the vessels in Group 10 H $_2$, whether they show traces of having been string cut or not, were not shaped into their final form until after they were separated from the potter's wheel.

139 Plate 20 :7 does not have a thickened rim.

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ring-based examples from northern and southern Babylonia (Pl. 23 : 7 and 15) in the counterpart Group 15 A 2 suggest that it is not out of place. This group was found in the Diyala Basin in the 17th century and is also attested in the Gulf.

*COMPARANDA*

*Northern Alluvial Plain*

*Babylon* : possibly REUTHER 1926, 9, fig. 2 : a-b.
*Kish* : DE GENOUILLAC 1924, Pls. **62** : 149 and **64** : 154.
*Sippar (Abu Habbah)* : *Sumer* 54, probably Pls. **58** : 1 and **63** : 3.
*Tell ed-Dēr* : *NAPR* 6, Pl. 7 : 6-7 ; the two sherds are close to Group 15 A 1 but were found in a 14th century context and could therefore be inherited from the underlying Late Old Babylonian layer.

*Southern Alluvial Plain*

*Larsa* : GASCHE in press, Pl. 2 : 31-33, sherds that probably belong to Group 15 A 1.
*Mashkan-shapir* : STONE and ZIMANSKY 2004, fig. 50 : AbD 87-53.
*Nippur* : besides Pl. 22 : 10-12 and 16-18 illustrated here, see also :
FRANKE 1978, fig. 59 : 1b
*OIP* 129, Pl. 88 : 6 (Ur III).
*Warka* : besides Pl. 22 : 13 illustrated here, see also :
*AUWE* 10, Pl. 14 : *Grab* 25a.
VAN ESS 1988b, figs. **4** : 11 and **5** : 19.

*Diyala Basin*

*Tell ed-Dhiba'i* : MUHAMMAD M. SHAKIR *et al.* 1984, illustr. on p. 64, center right.
*Tell Muhammad* : AMEL METAB 1989-90, 152, fig. 11 : 5 and 7.
*Tell Suleimah* : GHASSAN 1995, Pl. 143 : 518, 521 and 524.

*Gulf*

*Failaka* : HØJLUND 1987, figs. 294 and 295 which are close to our Pl. 22 : 8.
*Qala'at al-Bahrain* : HØJLUND and ANDERSEN 1994, figs. 463 and 702 (sherds which could belong to Groups 15 A 1 or 15 A 2).

## Group 15 A 2 (Pl. 23 : 4 to Pl. 24 : 6)

Curved bowls with simple rims and ring bases make up Group 15 A 2. The more sharply curved bowls (Pl. 23 : 4 and 11-12) have sides that turn upward nearly to the vertical.

The painted decoration on several 17th and 16th-century bowls in Group 15 A 2 (Pl. 23 : 6 and 16, and Pl. 24 : 3) and the horizontal groove just below the rim on Plate 23 : 11[140] tend to connect this group with the contemporary carinated bowls of Groups 25 A 1 and 25 A 2 (Pls. 41 and 42).

Group 15 A 2 is attested in the 18th through 16th centuries in the Northern Alluvial Plain, and in the 17th century in the South. This chronological pattern mirrors that of Group 15 A 1. Both Groups 15 A 1 and 15 A 2 are essentially limited to the 17th-century, the era of Hammurabi and Samsuiluna, in the Southern Alluvial Plain. Bowls of Group 15 A 2 from the Middle Euphrates can be dated to the late 17th and 16th centuries. The Diyala Basin examples are attested in the 18th century and again in the 16th.

*COMPARANDA*

*Southern Alluvial Plain*

*Nippur* : besides Pl. 23 : 14 and 16 illustrated here, see also :
*OIP* 78, Pl. 93 : 10.

*Middle Euphrates*

*Tell al-'Usiyeh* : FUJII *et al.* 1984-85, fig. 6 : 23.

## Groups 15 B 1 (Pl. 24 : 7-12) and 15 B 2 (Pl. 24 : 13-16)

Group 15 B 1 consists of small bowls or cups with curved sides, rounded or tapered rims and string-cut bases. Group 15 B 2 has ring bases.

The rare earlier members of the Group 15 B 1 (Pl. 24 : 10-12) have been found in northern Babylonia and Susiana and date from the 20th and 19th centuries. The sides of these examples clearly curve inward just below the rounded rim. On the later examples the sides never pass beyond the vertical and the rims are usually tapered. There is as yet no developmental connection between the two, and the earlier examples may be part of a limited and short-lived production during Ur III and early Isin-Larsa times. The later examples of Groups 15 B 1 and the entirety of Group 15 B 2 are perhaps best understood as the curved-sided variants of the straight-sided cups of Groups 10 B 1 and 10 B 2 (Pl. 13 : 4-Pl. 14 : 11). We have already suggested above under Group 10 B 1 that there is a continuum of shapes among these groups.

Groups 15 B 1 and 15 B 2 are essentially northern Babylonian groups, attested only infrequently during the 17th and 16th centuries. A single, possibly 17th-century example comes from the South. Group 15 B 1 has also been found in the Middle Euphrates.

*COMPARANDA*

*Northern Alluvial Plain*

*Tell ed-Dēr* : besides Pl. 24 : 7 to 11 of Group 15 B 1 illustrated here, see also :
*MHEM* 1, Pl. 27 : 1-6, 8-12, probably 13 (geometric design in dark paint), and 15-16.
Besides Pl. 24 : 13-15 of Group 15 B 2 illustrated here, see also :
*MHEM* 1, Pl. 27 : 20.
*TD* 4, Pl. 8 : 1.

*Middle Euphrates*

*Tell al-'Usiyeh* : AGHA 1987-88, fig. 36 : 40 and 42 (Group 15 B 1).

## Group 15 C (Pl. 25 : 1-5)

Group 15 C includes bowls with curved to carinated sides and thickened, horizontal rims. No complete profiles of Group 15 C have been recovered, and the shape of the base is unknown. This group is attested only in the Northern Alluvial Plain during the 20th and 19th centuries.

This group appears to be a variant of the contemporary northern Babylonian examples with near-carinated sides in Group 15 D (Pl. 25 : 15-19).

*COMPARANDA*

*Northern Alluvial Plain*

*Abu Qubur* : DE MEYER and GASCHE 1986, fig. 9 : 5.

## Group 15 D (Pl. 25 : 6-25)

Group 15 D includes small and medium-sized bowls with curved sides and outwardly beveled rims thickened to both the interior and exterior. Only a single complete profile (with ring base, Pl. 25 : 22) has thus far been recovered ; the existence of string-cut bases is likely, based on the evidence of similar bowls (e.g., 15 E 1 [Pl. 25 : 26-27]).

Some of the earlier northern bowls (Pl. 25 : 15-16, 19) are at the limit between this group and the carinated bowls of Group 20 K (Pl. 39), which have approximately the same date. The earlier vessels of Group 15 D also share the same general shape with the contemporary vessels of Group 15 C (Pl. 25 : 1-5). This suggests that Group 15 C (attested only in the North), the earlier northern examples from Group 15 D and Group 20 K represent the range of variation for a set of medium-sized, curved-sided/carinated bowls that was produced in northern Babylonia between the 20th and early 18th centuries.

The later, smaller northern bowls of Group 15 D (Pl. 25 : 6-14), dating from the late 18th through early 16th centuries, share the same rims with the deeper bowls of Group 15 E 1 (Pl. 25 : 26-

140 A second bowl with horizontal groove below the rim (D 100930) was found at Tell ed-Dēr in Area A Phase Ic, dated to the middle of the 17th century.

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27), with which they are contemporary. This suggests that both these shapes were part of the same production in northern Babylonia. Since the bowls of Group 15 $E_1$ have flat, string-cut bases, the later northern bowls of Group 15 D, or at least some of them, probably had flat, string-cut bases, as well.

The bowls of Group 15 D are attested from the 20th century until the early 17th in the Northern Alluvial Plain, where most of the examples have been found. The earlier vessels are generally wider than the later ones, and in some cases their sides are almost carinated below the rim (Pl. 25 : 15-19). This earlier, wide shape was replaced by a smaller, somewhat deeper shape around the middle of the 18th century. The sides of later examples generally curve more smoothly upward (Pl. 25 : 6-11 and 14). In southern Babylonia the group is also attested between the 20th and early 17th centuries. As was true in the North, the sides curve more smoothly and the vessels become deeper over time (Pl. 25 : 24-25 vs. Pl. 25 : 20-23). These bowls are also found in the Diyala Basin.

*COMPARANDA*

*Northern Alluvial Plain*

*Tell ed-Dēr* : besides Pl. 25 : 6-19 illustrated here, see also : *TD* 1, Pl. 12 : 15 ; found in *Chantier* A, Phase Ia and therefore probably inherited from an older context.

*Southern Alluvial Plain*

*Larsa* : CALVET *et al.* 2003, figs. **9** : a-c and **10** : a-e.

*Diyala Basin*

*Tell ed-Dhiba'i* : KHALID K. HAMMOUDI 1989-90, p. 100, left illustr., second row left.

*Tell Madhhur* : MOON and ROAF 1984, fig. 11 : 16, 17 and 20.

## Group 15 $E_1$ (Pl. 25 : 26-27)

Group 15 $E_1$ consists of small, deep curved-sided bowls with thickened, outwardly beveled rims and string-cut bases. This group is attested the Northern Alluvial Plain between the latter part of the 18th century and the early 17th. Three sherds from Larsa (southern Babylonia) mentioned in the *Comparanda* could belong to this group.[141]

Group 15 $E_1$ first appears at about the same time as the smaller northern bowls of Group 15 D (Pl. 25 : 6-11 and 14), which share the same thickened, outwardly beveled rims. It is possible that both were part of the same northern Babylonian production.

*COMPARANDA*

*Southern Alluvial Plain*

*Larsa* : See CALVET 2003, fig. 48 : 27.171 and 27.187 and CALVET *et al.* 2003, fig. 8 : c for sherds which could belong to Group 15 $E_1$.

## Group 15 $F_3$ (Pl. 26 : 1-5)

Group 15 $F_3$ represents medium-sized bowls with thick walls and thickened, inwardly beveled rims. Their bottoms are round (convex). The vessels of Group 15 $F_3$ have often been found in pairs, serving as containers for infant burials.

These bowls with their inwardly beveled rims are attested primarily in the northern site of Tell ed-Dēr from the early 18th century until around the middle of the 17th century. One 17th-century example comes from the southern site of Nippur (Pl. 26 : 5).

Group 15 $F_3$ represents a variant of the primary group of these bowls, Group 15 $H_3$ (with an outwardly beveled rim and convex base). There are three other variants, 15 $G_3$ (horizontal rim and convex base), 15 $H_1$ (outwardly beveled rim and flat base) and 15 $H_2$ (outwardly beveled rim and ring base). It should be kept in mind that members of all of these groups have often been found broken in excavations and therefore have not been recorded.

## Group 15 $G_3$ (Pl. 26 : 6)

Group 15 $G_3$ includes medium-sized, convex- or round-bottom bowls with thick walls and thickened, horizontal rims. This variant of Group 15 $H_3$ is attested at Tell ed-Dēr in the Northern Alluvial Plain during the 16th century. This group is also attested at Warka in the Southern Alluvial Plain in a 2nd-millennium context that is not closely dated but must be significantly earlier than the 16th century.[142]

*COMPARANDA*

*Northern Alluvial Plain*

*Tell ed-Dēr* : besides Pl. 26 : 6 illustrated here, see also : *MHEM* 1, Pl. 28 : 3.

*Southern Alluvial Plain*

*Warka* : *AUWE* 10, Pl. 15 : *Grab* 26, *Grab* 27, *Grab* 29 and *Grab* 30.

## Group 15 $H_1$ (Pl. 27 : 1)

Group 15 $H_1$ represents medium-sized, flat-based open vessels with a thick wall and a thickened, outwardly beveled rim. There is a single very early example from the Southern Alluvial Plain dating to the 20th century. We have included this vessel in Family 15, even though the side of this vessel is best described as straight and flaring, instead of curved, because there are a few other examples of bowls in other groups with nearly straight sides as well (e.g., Pl. 26 : 1 and Pl. 29 : 10-11). Collectively these bowls show the natural limit for the profile of this normally curved-sided shape. This shape is a variant of Group 15 $H_3$.

## Group 15 $H_2$ (Pl. 27 : 2 to Pl. 28 : 6)

Group 15 $H_2$ includes open vessels with curved sides, thick walls, thickened, outwardly beveled rims and ring bases. This group is a variant of the following Group 15 $H_3$.

The sequence of examples excavated at Tell ed-Dēr permits the identification of three stages in the evolution of this group during the first half of the 2nd millennium. The earliest vessels (Pl. 27 : 7-9), from the 19th century, are significantly smaller than most of their later counterparts. Unlike later examples, these seem not to have been used in infant burials. Nevertheless, they share the same wide, shallow profile of the larger vessels belonging to the second stage of development (Pl. 27 : 4-6). The latest vessels are usually narrower and deeper than their predecessors (Pl. 27 : 2-3 and Pl. 28 : 2-3), though there are exceptions (Pl. 28 : 1 and 4). This progression from a broader, shallower shape to a narrower, deeper one will also be seen in Group 15 $H_3$.

Group 15 $H_2$ is attested from the 19th to the 17th centuries in the Northern Alluvial Plain. This group is also minimally attested in the Southern Alluvial Plain : sherds are reported from Warka (see *Comparanda* below), and one example of the late 18th or early 17th century is described in the al-Hiba excavation

141 GABUTTI 2002-03, Pl. 37 : 1, from Yelkhi in the Upper Diyala Basin, has a deeper, less open profile than members of Group 15 $E_1$ and also has a ring base. For these reasons it has not been included in this group as defined.

142 Group 15 $G_3$ does not cohere well. It is attested only in two contexts, at Tell ed-Dēr – where two examples were inserted by half or more of their height in the floor of the so-called house of Ur-Utu (cf. *MHEM* 1, legends of Pl. 28 : 3 and 4) – and at Warka, two sites that are far from each other in both space and time. Therefore, it might have been better to include the members of this group, distinguished only by their horizontal, as opposed to outwardly beveled, rims, within the main group, Group 15 $H_3$.

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records ; its drawing, however, is unavailable.[143] This ring-based group is therefore primarily a northern Babylonian shape. It has also been found in small numbers along the northern periphery of Babylonia, as well. An example from the Diyala Basin dates to the late 17th century. Plate 28 : 5, from the Middle Euphrates and dating to the latter half of the 16th century, is the latest attested example. That this bowl post-dates the latest attested examples from the Babylonian heartland is probably not significant. Farther afield, this shape is also attested in the Middle Tigris Basin and in the northern Levant.

*COMPARANDA*

*Northern Alluvial Plain*

*Sippar (Abu Habbah)* : AL-JADIR 1987, 201, illustrations **4** : b and **6** : b (photos).

*Southern Alluvial Plain*

*Warka* : VAN ESS 1991a, Pl. 108 : 38 ; on p. 95, the author states that only sherds of this type were found, mostly around the area of Sînkāšid's Palace and in the north-eastern part of the city.

*Levant*

*Tell Atchana* : WOOLLEY 1955, Pl. 110 : 14b.

*Middle Tigris Basin*

*Assur* : BEUGER 2005, Katalog 2, Pl. 7 : 16, 18 and 20 (rim sherds).

*Nineveh* : MCMAHON 1998, fig. 11 : 8, close to our Pl. 28 : 1. On p. 28 A. McMahon refers to a parallel from Dhinkha Tepe, NW Iran, that could not be checked.

## Group 15 H 3 (Pl. 29 : 1 to Pl. 30 : 9)

Group 15 H 3 represents open vessels with convex (round) bases, curved sides, thick walls and thickened, outwardly beveled rims. This is the best attested chronologically and geographically of the five related groups of thick-walled bowls that date to the early 2nd millennium. The other variants are Group 15 F 3 (inwardly beveled rim and convex base), Group 15 G 3 (horizontal rim and convex base), Group 15 H 1 (outwardly beveled rim and flat base) and Group 15 H 2 (outwardly beveled rim and ring base).

The progression from broader, shallower vessels to narrower, deeper ones, already noted above in Group 15 H 2, is evident here as well in the five-century-long sequence of this shape from Tell ed-Dēr in the Northern Alluvial Plain. The smallest examples, dating to the 20th century, display broad, shallow profiles (Pl. 29 : 10). During the 19th and early 18th centuries, larger forms with shallow profiles were produced (Pl. 29 : 1-9), while from the late 18th through the 16th centuries, the shape became narrower and deeper (Pl. 30 : 1-5).

Group 15 H 3 is also attested in the Southern Alluvial Plain in the 20th and 17th centuries. The gap in attestations is probably due to insufficient recording of this shape. As in the North, the earliest southern examples (Pl. 29 : 11-12), from the 20th century, are the smallest. The group is found in the Diyala Basin in the 17th century, as well.

An example similar to Group 15 H 3 but with a rounded rim has also been found in the Middle Tigris Basin. Three incomplete vessels found in the Barbar temples (Bahrain) could also belong to this group, but the outwardly beveled rims are more steeply inclined.

*COMPARANDA*

*Northern Alluvial Plain*

*Sippar (Abu Habbah)* : *Sumer* 54, Pls. **53** : 2-8 and **57** : 9-11.

*Tell ed-Dēr* : besides the vessels illustrated here on Pls. 29 and 30, see also :
*TD* 4, Pl. 21 : 10.

*Southern Alluvial Plain*

*Larsa* : CALVET 2003, fig. 36 : 59.152 and 59.153 (no scale). The rim of the vessel illustrated by CALVET (2003, fig. 36 : 59.145 [no scale]) belongs to Group 15 G 3 but the depth of the vessel would suggest associating it with Group 15 H 3.

*Nippur* : besides Pl. 29 : 11-12 illustrated here, see also :
*OIP* 78, Pl. 82 : 12 (vertical rim).
*OIP* 129, Pl. 92 : 1-3 and 5-7 (very Late Akkadian-Ur III).

*Warka* : VAN ESS 1991a, 95, Pl. 108 : 39.

*Middle Tigris Basin*

*Tell al-Fakhar* : YASIN MAHMOUD 1970, Pl. 19 : TF.660, probably with a convex base but with a rounded rim.

*Gulf*

*Barbar (Bahrain)* : ANDERSEN and HØJLUND 2003, probably figs. 481-483 all fragmentary and with more steeply inclined rims.

# FAMILY 20

Family 20 includes open vessels with a carination above the middle of the body. For most of the groups in this family the carination can be understood essentially as setting the rim off from the body. The presentation of the groups generally moves from forms with very high carination – just below the rim – to those with carination somewhat lower on the body. Groups 20 A through 20 E 1 are closely related to one another, either as contemporary morphological variants of one basic shape, the small carinated bowl (and lid) of Group 20 E 1, or as stages in the development of this shape over time.

The remaining groups in this family (Groups 20 F 1 through 20 L) are not closely related to Group 20 E 1.

## Group 20 A (Pl. 31 : 1-4)

Group 20 A represents a shape variant of Group 20 E 1. In contrast with Group 20 E 1, where the side of the bowl is everted above the carination, in Group 20 A the rim and the side are reduced to a vestigial rounded nub above the "carination." Plate 33 : 30, belonging to Group 20 E 1 and contemporary with the Group 20 A examples, represents the limit between the two groups.

Only rim sherds of Group 20 A are attested. All come from 19th-century Tell ed-Dēr in the Northern Alluvial Plain. There is also an example from Assur in the Middle Tigris Basin.

*COMPARANDA*

*Middle Tigris Basin*

*Assur* : BEUGER 2005, Katalog 2, Pl. 17 : 1.

## Group 20 B 1 (Pl. 31 : 5-10)

Group 20 B 1 contains small bowls with high carinations, very small rims and string-cut bases.

As a variant of the main group of small carinated bowls, Group 20 E 1, Group 20 B 1 is attested in the Southern Alluvial Plain between around 1800 and 1700, the latter part of the Isin-Larsa Period. This group represents the culmination of a tendency for the rim to get smaller over time, indeed almost to disappear. Richard Zettler, when working on the pottery at Nippur, first observed and reported on the decreasing size of rims/sides of these bowls above the carination in an unpublished study of the Isin-Larsa carinated bowls excavated at Nippur during the 1970s.[144]

[143] This vessel, from Burial 1 HB 3, bears the field catalog number 1 H 94.

[144] See also the mention of this phenomenon under Group 20 E 1.

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Group 20 B 1 has been found in 18th-century contexts at Nippur itself, and at the nearby sites of Isin and Umm al-Hafriyat in the Southern Alluvial Plain. It has also been attested at Susa, where, however, there is only a single example, possibly imported, and in the Gulf.

*COMPARANDA*

*Southern Alluvial Plain*

*Nippur* : besides Pl. 31 : 7-9 illustrated here, see also : *OIP* 78, Pl. 82 : 23.

*Gulf*

*Qala'at al-Bahrain* : HØJLUND and ANDERSEN 1994, fig. 265 (similar to our Pl. 31 : 8).

*Susiana*

*Susa* : *MDP* 46, Pl. 4 : 20 ; this bowl and a second different in shape (Pl. 4 : 19), were found in a pit (see p. 49) of which the top was removed by de Mecquenem's excavations ; although the pit is mentioned in the Ur III section, the presence of these two bowls supports an 18th-century date.

## Group 20 B 2 (Pl. 31 : 11-14)

Group 20 B 2, with ring bases, high carinations and very small rims, is attested in the Northern Alluvial Plain in the late 19th and early 18th centuries. Though we have two possible examples from southern Babylonia, one from al-Hiba with a finished flat base (Pl. 31 : 14) and a sherd from Larsa (see *Comparanda*), we believe that this group is in essence a northern variant of Group 20 E 1. It is not a part of the same phenomenon of shrinking rims described above under Group 20 B 1. Rather, Group 20 B 2 represents the production in northern Babylonia around 1800 of finer, more elegant small bowls than those in the main group of small carinated bowls, Group 20 E 1.

*COMPARANDA*

*Northern Alluvial Plain*

*Tell ed-Dēr* : besides Pl. 31 : 11-13 illustrated here, see also : *TD* 4, Pls. **20** : 8 and **21** : 3, 6.

*Southern Alluvial Plain*

*Larsa* : CALVET *et al*. 2003, fig. 11 : k (sherd).

## Group 20 C 1 (Pl. 32 : 1-16)

Group 20 C 1 comprises small bowls with string-cut bases and flaring sides that are turned upward just below the rim. The rim itself is typically thinned down to an acute angle instead of being rounded. Group 20 C 1 may be regarded as a variant of Group 20 E 1. There is a continuity of shapes between the two groups, and some examples in each group might find a home in the other. An essential distinction, however, is that the rims of Group 20 E 1 are out-curving or everted above the carination, whereas the rims of Group 20 C 1 are more-or-less straight and nearly vertical, sometimes slightly inward leaning, above the carination.

Group 20 C 1 is attested spottily between the 18th and 16th centuries in the Northern Alluvial Plain. A similar but incomplete bowl was found at the surface of Kassite Area E 3 in Tell ed-Dēr ;[145] despite the fact it has a filled-in base, we consider it as inherited from the underlying Old Babylonian remains. In the Southern Alluvial Plain examples date from the 20th to the 17th centuries.

In southern Babylonia, the 20th- through 18th-century examples included in Group 20 C 1 (Pl. 32 : 11-14) may be poorly shaped examples at the margins of Group 20 E 1. The latest southern examples, from the 17th century (Pl. 32 : 5-10), however, can probably best be understood as representing terminal vestiges of the several groups of small carinated bowls of the Ur III and Isin-Larsa Periods. The "classic" small carinated bowls of Group 20 E 1, which dominated the ceramic assemblages from the 20th through the 18th centuries, were no longer being made after the beginning of the 17th century. What remained were the morphologically simpler bowls of Group 20 C 1. However, unlike the earlier Group 20 E 1, Group 20 C 1 was no longer the most common small-bowl form in the 17th century. That position in the ceramic inventory was filled by the straight-sided bowls of Group 10 A 1.

Examples from the Middle Euphrates (Pl. 32 : 15) have their own local history of development, which extends back before the beginning of the 2nd millennium. We have included them here because the relatively infrequent examples of Group 20 C 1 in the Northern Alluvial Plain (Pl. 32 : 1-4) may, in fact, represent the influence of the Middle Euphrates ceramic tradition on the local northern Babylonian tradition. Farther to the west examples of this shape are reported at Hama in Central Syria. The shape is also attested at Susa and at Failaka in the Gulf.[146]

*COMPARANDA*

*Northern Alluvial Plain*

*Sippar (Abu Habbah)* : *Sumer* 54, Pl. 62 : 8 and probably 9.

*Tell ed-Dēr* : besides Pl. 32 : 2 illustrated here, see also : *MHEM* 1, Pl. 26 : 10.

*Southern Alluvial Plain*

*Abu Salabikh* : POSTGATE and MOON 1984, 72, fig. 3.

*Larsa* : besides Pl. 32 : 5 illustrated here, see also : CALVET 2003, figs. **54** : 27.30 and **63** : 59.150. CALVET *et al*. 2003, fig. 6 : i and k. GASCHE in press, Pls. **1** : 27 and **2** : 47, 52, sherds that probably belong to Group 20 C 1.

*Nippur* : besides Pl. 32 : 6-14 illustrated here, see also : FRANKE 1978, fig. 59 : 1b. *OIC* 22, fig. 39 : 720127. *OIP* 78, Pl. 88 : 6. *OIP* 129, Pl. 86 : 1-2 and 4-7 (Late Akkadian-Ur III).

*Central Syria*

*Hama* : FUGMANN 1958, figs. **109** : 3B964, **117** : 3B320 and **120** : 2C932.

*Middle Euphrates*

*Mari* : LEBEAU 1987, possibly Pl. 6 : 3-5. PONS 1999b, fig. 4 : 4.

*Sweyhat Survey* : WILKINSON 2004, fig. 6.8 : 23.

*Susiana*

*Susa* : CARTER 1980, fig. 38 : 1. *MDP* 46, Pls. **2** : 27 and **3** : 18.

## Group 20 D 1 (Pl. 33 : 1-10)

Group 20 D 1, consisting of small shallow bowls with string-cut bases and wide band rims, is a distinctive early variant of Group 20 E 1. The carination that is otherwise characteristic of Group 20 E 1 is "swallowed up" by the large, overhanging, slightly concave band rim of the Group 20 D 1 vessels. The wide band rim is oriented vertically (Pl. 33 : 2, 4 and 7) or is angled inward from top to bottom (Pl. 33 : 1, 3, 5-6 and 8-10). The irregular and uneven bases of some examples (Pl. 33 : 3 and 6) reflect the relative carelessness with which these vessels were made.

The uneven bases on some examples together with the distinctive overhanging band rims may indicate that these vessels were not intended to serve as bowls but were primarily used as lids. If one were placed right-side up in the mouth of an appropriately sized jar, the overhanging band would then encircle the jar rim and help hold the bowl/lid in place.

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145 *NAPR* 6, Pl. 9 : 5 ; the whole profile is preserved.

146 Our Pl. 32 : 16 (= Type 67A of HØJLUND 1987, 77) is reported to belong to Period 3B of Failaka, which is dated to the Early Kassite Period (*ib*., 109 and 159). We can not, however, agree with a Kassite date for this bowl ; therefore, we place it in the 17th century, where it finds parallels illustrated on our Pl. 32.

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Group 20 D 1 is attested only at a cluster of sites in the northern part of the Southern Alluvial Plain – Nippur, Isin[147] and Umm al-Hafriyat (unpublished) – in the 20th and 19th centuries, that is, in the Ur III and Early Isin-Larsa Periods. It has not been reported at sites farther south, like Ur, Warka, Telloh or al-Hiba, where relevant contexts have been exposed, nor anywhere in the Northern Alluvial Plain.

*COMPARANDA*

*Southern Alluvial Plain*

*Isin* : besides Pl. 33 : 4 illustrated here, see also :
*Isin* 2, Pl. 32 : 48.

*Nippur* : besides the bowls from Nippur illustrated on Pl. 33, see also :
GIBSON 1978, fig. 8 : 8.
*OIC* 22, fig. 42 : 030127.
*OIP* 78, Pl. 82 : 21-22.
*OIP* 111, Pl. 77 : g (found in a Kassite Level but probably an earlier holdover).
*OIP* 129, Pl. 94 : 1-2 and 4-11 (Ur III-Isin-Larsa).

## Group 20 E 1 (Pl. 33 : 11 to Pl. 34 : 40)

Group 20 E 1 consists of small bowls with string-cut bases, sides with high carination, and generally simple, vertically oriented, concave rims. This is the principal group of small carinated bowls at the beginning of the 2nd millennium, but the group is already attested during the late 3rd millennium, when the bowls are larger than in subsequent periods.[148] The other groups from Group 20 A 1 to Group 20 D 1 represent variants of this primary group. The bowls in Group 20 E 1 are generally rather carelessly made and finished. The uneven rims and bases of many examples testify to the indifference that is characteristic of these bowls' manufacture.

The diameters of the rims mostly fall between about 100 and 160 mm, though larger and smaller examples exist. The largest example reported from Tell ed-Dēr in the North has a diameter of 300 mm ; the diameter of the largest from the southern site of Nippur is 220 mm.

At Tell ed-Dēr in the Northern Alluvial Plain the bowls of Group 20 E 1 decrease in size significantly during the 18th century. In the 20th and 19th centuries, diameters range between about 12 and 20 cm, with a smaller examples beginning to appear at the end of the 19th century (Pl. 33 : 22-43). By contrast, later examples, from the first half of the 18th century, have diameters of less than 16 cm ; for the most part their diameters are less than 12 cm. Their height decreases correspondingly (Pl. 33 : 11-21).

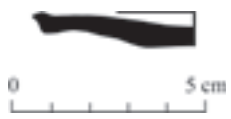


Fig. 2. Extremely shallow example of Group 20 E 1.
Nippur : A 107, WA, Level V, ø rim : 85. *OIC* 22, fig. 39 : first row far right. Restanced.

Plate 34 : 1 shows an 18th-century bowl from Nippur, Area WA, Level V with a small, very short rim above the carination. Measurements of sherds and whole profiles from Area WA at Nippur taken by Richard Zettler indicate that the height of the rim above the carination tends to decrease over the course of the 19th and 18th centuries as the bowls become increasingly smaller (between Levels VIB and V of Area WA). The 18th-century carinated bowls of Group 20 B 1 (Pl. 31 : 5-10) represent the extreme of this trend toward smaller rims.

Figure 2 is a sherd from a very small, extremely shallow example of Group 20 E 1 found at Nippur and dating to around 1800. This bowl is so shallow as to be useless as a container. A similar sherd has been published from Warka (VAN ESS 1988a, fig. 4 : 44). These were almost certainly lids, and many members of Group 20 E 1 and its variants probably also were used, when needed, as jar lids.[149]

Group 20 E 1 represents the most common small bowl in Babylonia from the 20th century through most of the 18th century, that is, in the Ur III and Isin-Larsa Periods. Great numbers are present at both northern and southern Babylonian sites. Based on the tightly controlled stratigraphic results from Area A at Tell ed-Dēr in northern Babylonia, Group 20 E 1 continued to be actively produced until the third quarter of the 18th century (Phase Ii). At Nippur in the South whole examples of Group 20 E 1 do not appear in the Old Babylonian house in WB IV, first built early in the 17th century, which is consistent with these bowls going out of production at Nippur by around 1700.[150]

The detailed survey of the mounds of Warka made by the Germans in 1982-1984 shows that bowls of Group 20 E 1 are rarely found in the vicinity of Sînkāšid's Palace (VAN ESS 1991a, 93) ; this observation supports our contention that the palace continued to be occupied long after Sînkāšid, who ruled Uruk in the 18th century (see also the Final Remarks).

These bowls are present in significant numbers in Susiana between the 20th and the middle of the 18th century. At Susa, however, they often have taller rims above the carination than is the case in Babylonia proper (Pl. 34 : 36-37 and 39). Group 20 E 1 also appears in the Middle Euphrates[151] and in Central Syria but in significantly fewer numbers and nearly always with a finished disk base.

Group 20 E 1 is also well represented in the Diyala Basin from the 20th through the 18th centuries. In his publication of pottery from the Diyala region, P. Delougaz reported that our Group 20 E 1, which he designated "B.151.210" (*OIP* 63, Pl. 150), was "the most popular form" of bowl in the Ur III Period (*ib*., 113) and "the most common among household bowls of the Larsa period" (*ib*., 115). It appears to be less common in the Upper Diyala Basin, though it is by no means absent; examples have been reported from Tell Yelkhi, Tell Suleimah and Tell Genj.[152] The group is attested in the Middle Tigris Basin and the Southern Zagros Piedmont. It has also been found at sites in the Gulf, as well.

147 This shape was provisionally dated to the Late Roman Period at Isin (*Isin* 2, 84). However, as the excavators immediately recognized, this was not correct (*Isin* 2, 88 *sub* 47-48).

148 For bowls or sherds which belong or are supposed to belong to the Akkadian Period, see for example MARTIN 1983, fig. 2 : 1 (Fara), GIBSON 1972a, sherds on figs. 42-44 and 46 (Umm el-Jīr [see *Comparanda* for details]), *OIP* 63, Pl. 150 : B.151.210 (Diyala sites), and *MDP* 46, Pls. **5** : 14, 17 and possibly **11** : 15 (Susa).

149 The multipurpose character of these vessels is also supported by the presence of heavy soot traces inside and on the rim of a number of them found in burials of the 19th and 18th centuries at Susa (unpublished) where they were used as lamps or for rituals requiring fire.

150 To be sure, *sherds* of Group 20 E 1 bowls have been found in 17th century contexts at Nippur (from Area WB IV, unpublished), Larsa (MINSAER 1990, Pl. 10 : a-c = CALVET *et al*. 2003, fig. 11 : a-c) and Tell ed-Dēr (*TD* I, Pl. 12 : 1-6), but these appear to be strays, and we judge that they do not represent the active production of Group 20 E 1.

151 See for example PONS 1999a, Pls. 17 : 1, 3-4.

152 Larger bowls similar to those of Group 20 E 1, having somewhat different rim profiles, have been reported from Upper Diyala sites that were occupied during the late 2nd millennium, but not during the early 2nd millennium. These include Tell Ajamat (ARMSTRONG 1981, Pl. 115 : 41-48 and 50), Tell Imlihiye (*BaF* 7, Pl. 29 : 44-46, 48 and 50-55 ; Pl. 30 : 56-62 ; and Pl. 31 : 66-69) and Tell Zubeidi (*ib*., Pl. 115 : 176-190 and Pl. 116 : 194). On present evidence, we believe these examples represent local, non-Babylonian vessels of the late 2nd millennium, and we have not included them in this study.

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*COMPARANDA*

*Northern Alluvial Plain*

*Abu Qubur* : DE MEYER and GASCHE 1986, figs. **8** : 24 and **9** : 2-3.
*Sippar (Abu Habbah)* : AL-JADIR 1987, 203, illustr. 9 : b.
*Sumer* 54, Pls. **58** : 5, 15-16 and **62** : 5.
*Tell ed-Dēr* : besides the bowls illustrated here on Pl. 33, see also :
*TD* 4, Pls. **10** : 3-7, **12** : 1-3, **13** : 3, **14** : 16-19, **20** : 7 and 9.
*Umm el-Jīr* : GIBSON 1972a, figs. **42** : c, **43** : B-3a, 3, B-3b, 3 and B-4, 3, **44** : B-7, 4 and **46** : Phase V, 1 (Akkadian-Ur III).

*Southern Alluvial Plain*

*Abu Salabikh* : POSTGATE and MOON 1984, 72, fig. 6.
*Fara* : MARTIN 1983, fig. 2 : 1 = MARTIN 1988, fig. 41 : 13.
*Isin* : besides Pl. 34 : 2, 3 and 5 illustrated here, see also :
*Isin* 1, Pls. **27** : IB 292, 298, 386 and **28** : IB 413.
*Isin* 4, Pl. 52 : 11.
*Larsa* : besides Pl. 34 : 6 and 10 illustrated here, see also :
CALVET *et al*. 2003, figs. **11** : a-f, h, i and, from Parrot's 1967 exc., **33** : a-c.
*Mashkan-shapir* : STONE and ZIMANSKY 2004, fig. 50 : AbD 87-388.
*Nippur* : besides the bowls from Nippur illustrated here on Pl. 34, see also :
FRANKE 1978, fig. 63 : WB Type I-B.
GIBSON 1978, figs. **8** : 1, 5 and **19** : 2.
*OIC* 22, figs. **39** : 020127, 210127 and **42** : 220127.
*OIP* 78, Pls. **82** : 19-20 and **88** : 9 and 10.
*OIP* 111, Pl. 77 : h-k (found in a Kassite Level but probably earlier holdovers).
*OIP* 129, Pl. 90 (Ur III-Isin-Larsa).
*Tell al-Wilaya* : HUSSEIN *et al*. 2009, fig. 19 : p ; see p. 22 for chronological information.
TARIQ MADHLUM 1960, fig. 3 : 19.
*Tell Laham*: FUAD SAFAR 1949, Pl. IV: 2 and 6.
*Telloh* : DE GENOUILLAC 1936, Pls. **112** : 4a and **XXXIII** : 1110.
*Ur* : WOOLLEY 1934, types **26** (rim ending horizontally) and **27**.
*Warka* : besides Pl. 34 : 26 illustrated here, see also :
*AUWE* 10, Pls. **6** : c1-c4, **9** : a-c, g-i, **11** : *Grab* 15d-f, **12** : *Grab* 19a; **16** : c-e, k-l, **17** : g, **19** :c-d and **21** : *Grab* 38b.
VAN ESS 1988a, fig. 4 : 44.
*Id*. 1988b, figs. **3** : 1, 3 and **8** : 46-47.
*Id*. 1991a, 93, Pl. 105 : 1.
*Id*. 1993, figs. **8** : 129, **9** : 134, 136, 139-142, **10** : 149-150, **11** : 151, **13** : 164, **14** : 170-172 and **15** : 176-178, 182-184.

*Central Syria*

*Tell Mardikh* : DAVICO and MATTHIAE 1967, figs. **11** : 9 and **12** : 3-4.
LIVERANI and MATTHIAE 1965, Pl. 43 : 6 (string cut base) and 7 (finished disk base).
MATTHIAE 1980, fig. 34 : second line, left.

*Middle Euphrates*

*Mari* : PONS 1999a, notably Pl. 17 : 1, 3 and 4 but with a finished disk base.
*Terqa* : TASSIGNON 1997, fig. 43: 10 (fragment of rim close to our Pl. 33: 27).

*Middle Tigris Basin*

*Assur* : BEUGER 2005, Katalog 1, Pls. **1** : 8, and **5** :3-7 ; Katalog 2, Pls. **4** : 1 and **20** : 1-8.
DITTMANN 1997-98, fig. 10 : 4.
HOCKMANN 2010, Pls. **56** : 20455g and 20455q (photo), **64** : 20516i, **66** : 20535, **67** : 20550f and 20550l, **72** : 20554c, 20554ae, 20554ak and 20554au, **76** : 20561n, and **79** : 20573x, 20573w, 20573ak, 20573ar, 20573ay and 20573az.
*Nineveh* : MCMAHON 1998, fig. 7 : 27-28 ; later 3rd millennium.
*Tell Basmusian* : BEHNAM ABU AL-SOOF 1970, Pl. 40 : 11.

*Diyala Basin*

*Tell ed-Dhiba'i* : AL-GAILANI 1965, Pl. 1 : 12.
*Tell Genj* : WILSON-BRIGGS *et al*. 1984, Pl. 8 : 6 and probably 8.
*Tell Suleimah* GHASSAN 1995, Pl. 144 : 539.
*Tell Yelkhi* BERGAMINI 2002-03, Pl. 4 : 22 (complete shape) and Pl. 4 : 6-9 and 11-21 (sherds) (Akkadian-Ur III).
GABUTTI 2002-03, Pl. 39 : 7, 9, 13 and 16 (rim sherds; Isin-Larsa).

*Gulf*

*Failaka* : PIC 2008, fig. 19 : 119 and 120.
HØJLUND 2012, fig. 4 : 5.
*Qala'at al-Bahrain* : HØJLUND and ANDERSEN 1994, figs. 266-268.

*Susiana*

*Farukhabad* : CARTER 1981, fig. 84 : a-b.
*Susa* : besides Pl. 34 : 36-40 illustrated here, see also :
*MDP* 46, Pls. **2** : 2-8, 20 and 34-35, **4** : 1-4 (Ur III), **5** : 14, 17 (Late Akkadian) and possibly **11** : 15 (Akkadian).
*MDP* 47, Pl. 7 : 3-7, 9-14, 16-17 and 19-29.
CARTER 1980, figs. **38** : 3, **41** : 1, 2, 3 (= Pl. 6 : 3) and 4, **45** : 4-6 and **49** : 7, 9, 10-13.
DE MECQUENEM 1934, fig. 76 : 29. *Id*. 1943, fig. 70 : 12.
PONS 1991, Pl. 2 : 5 (Louvre, *fonds ancien*).

*Southern Zagros Piedmont*

*Tell Abu Sheeja* : AYAD MOHAMMAD HUSSEIN *et al*. 2010, fig. 40 : d.

## Group 20 F 1 (Pl. 35 : 1-5)

Group 20 F 1 consists of typically small bowls with string-cut bases, sides with high carination and simple rims that are vertically oriented and concave or everted and straight.

Even though the basic description of Group 20 F 1 is very similar to that of Group 20 E 1, there are several reasons to distinguish the two groups. With rim diameters between 160 and ± 200 mm, bowls in Group 20 F 1 are all as large as the largest examples of Group 20 E 1. The bowls in Group 20 E 1 decreased in size significantly during the 18th century in northern Babylonia. The latest examples have diameters of less than 160 mm ; for the most part their diameters are less than 120 mm (Pl. 33 : 11-21). The diameters of Group 20 F 1, which began to be manufactured about a century after the end of Group 20 E 1, are consistently larger. Smaller rim diameters, which predominated in Group 20 E 1, especially during the 18th century, the last century of its production, are missing. The fabric of Group 20 F 1 is less dense and less well levigated than is true for Group 20 E 1 ; and the Group 20 F 1 vessels are, if anything, even more crudely manufactured than the carelessly made examples in Group 20 E 1. Combined with the century-long gap between the two groups, these differences strongly suggest that they should be kept separate.

Group 20 F 1 is found in northern Babylonia from the mid-17th to the mid-16th century. It is also attested in the adjacent Lower Diyala Basin at Tell Muhammad.

The profiles of some of the bowls in Group 20 F 1 (Pl. 35 : 2) approach some of those in Group 20 G 1, which follows. Groups 20 F 1 and 20 G 1 are largely contemporary with one another in the 17th and 16th centuries.

*COMPARANDA*

*Northern Alluvial Plain*

*Tell ed-Dēr* : besides Pl. 35 : 1-5 illustrated here, see also :
*TD* 1, Pl. 12 : 4.

*Diyala Basin*

*Tell Muhammad* : AMEL METAB 1989-90, 152, fig. 11: 3.

## Group 20 G 1 (Pl. 35 : 6-17)

Group 20 G 1 includes small bowls with everted rims, string-cut bases and sides that tend to be slightly carinated above their midpoint. In more than a few examples, however, the carination is replaced by a ridge on an otherwise virtually straight, flaring side (Pl. 35 : 7, 11-12, 14 and 17). On a few of the latest examples even the vestigial ridge is gone, and all that remains of what had earlier been a carination is an indentation on the interior surface of the vessel wall (Pl. 35 : 6 and 8).

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These bowls are attested in the Northern Alluvial Plain in the 17th and 16th centuries. They are also found in the nearby Lower Diyala Basin. Possible examples come from Isin (Southern Alluvial Plain) and Failaka (Gulf).

*COMPARANDA*

*Northern Alluvial Plain*

*Sippar (Abu Habbah)* : *Sumer* 54, probably Pl. 58 : 14.
*Tell ed-Dēr* : besides Pl. 35 : 6-17 illustrated here, see also :
*TD* 1, Pl. 12 : 1-2.
*TD* 2, Pl. 18 : 5.

*Southern Alluvial Plain*

*Isin* : for a possible S. A. P. variant, see *Isin* 3, Pl. 28 : 7 (IB 1351).

*Diyala Basin*

*Tell Muhammad* : AMEL METAB 1989-90, 152, fig. 11: 4.

*Gulf*

*Failaka* : HØJLUND 1987, possibly fig. 313.

## Group 20 H 1 (Pl. 36 : 1 to Pl. 37 : 25)

Group 20 H 1 represents small bowls with simple, rounded rims, string-cut bases and more-or-less carinated sides. These bowls are sometimes described as "wavy-sided," because their sides frequently have a wavy or rippled appearance and lack the sharp angle of true carination. They were carelessly made, and are often asymmetrical. They display a host of minor variations and irregularities in shape (see Pl. 36 : 5 [photo]). These differences, it must be stressed, seem to arise solely from the indifferent way in which the bowls were produced and cannot be assigned either spatial or temporal significance. As a group, examples of Group 20 H 1 from the Southern Alluvial Plain look exactly like their counterparts in the North. In general these bowls have a thick base, thicker than in bowls of the early 2nd millennium. This characteristic thick base was a consequence of the way they were manufactured, frequently involving the preventative strengthening method referred to here as the filled-in base technique (Pl. 36 : 2-4, 8, 12, 14-15 and 17), coupled with the speed with which they were produced. On the strength of the evidence of these bowls, we can say that the filled-in technique was regularly being employed to make small bowls in the 15th century (Pl. 36 : 14-15 and 17).

It is tempting to see the precursors of the characteristic Kassite wavy-sided bowls (Group 20 H 1) among the bowls of Group 20 G 1. From a morphological standpoint, Group 20 G 1 is a good candidate, because the profiles of the two groups are somewhat similar. The earliest examples in Group 20 H 1, Plate 36 : 17-18 from Tell ed-Dēr are close in shape to bowls in Group 20 G 1, except that their characteristic "Kassite" (filled-in) bases are noticeably thicker. On the other hand, Group 20 G 1 is a relatively minor group in 16th-century Tell ed-Dēr. A possible link is represented by a variant wavy-sided bowl found in A XI *ancien* at Susa and dated to around 1400 BC (see *Comparanda*). A number of other Early Kassite shapes show up at Susa after the fall of Babylon at the beginning of the 15th century NLC (see Groups 210 A 2, 210 B 2 and 215 A 2 below).

In light of the unbridged chronological gap of nearly a century between Groups 20 G 1 and 20 H 1 in Babylonia proper, the nature of the relationship between them, if any, must remain uncertain for the present. It is also possible that the Kassite wavy-sided bowls developed directly from the straight-sided bowls of Group 10 A 1, the most typical of the Old Babylonian bowls. The bowls in both groups are of similar sizes, and in terms of relative numbers Group 20 H 1 takes the position of Group 10 A 1 in the late 2nd-millennium assemblage.

Group 20 H 1 is the most frequently attested and most characteristic small bowl in Babylonia from the middle of the 15th century until the 11th century. This extraordinarily long period of preeminence – about four centuries – may be even longer, but we lack sufficient evidence from the years immediately before and after the attested time span to be able to say one way or the other.

Bowls of Group 20 H 1 are found in the Northern Alluvial Plain from the middle of the 15th century until the 13th century. In the Southern Alluvial Plain they are attested in the 14th, 13th and 12th-11th centuries. They are also present in the Middle Euphrates, along with other Late Kassite pottery shapes. The group is also attested farther to the northwest in the Balikh Basin. At several Hamrin sites in the Upper Diyala Basin, they have been found in contexts that date between around 1400 and 1150. To the east, examples have also been found in Western Iran.

These bowls have been found in the Gulf together with other forms that belong to the Kassite Period. Plate 37 : 24, from Qala'at al-Bahrain, was excavated with a group of Late Kassite shapes that are broadly datable to the 13th century (HØJLUND 1987, 156, figs. 694-706). Earlier bowls, belonging to Bahrain Period IIIb1, date to around 1400 (HØJLUND and ANDERSEN 1997, 90, figs. 208-212). The bowls of this earlier group are somewhat larger than the norm for this shape in Babylonia (rim diameters of 150-170 mm vs. 120-140 mm). However, the single example with a whole profile, our Plate 37 : 25, displays the thick base that is frequently present on members of Group 20 H 1.

*COMPARANDA*

*Northern Alluvial Plain*

*'Aqar Qūf* : TAHA BAQIR 1945, Pl. 23 : Levels I, II and IV.
*Babylon* : REUTHER 1926, Pl. 58 : 49c.
*Sippar (Abu Habbah)* : *BaM* 36, Pls. **19** : 2806 and **20** : 2840.
*Tell Abu Shijar (near 'Aqar Qūf)* : JASIM *et al*. 2006, fig. 9 : 2.
*Tell ed-Dēr* : besides Pl. 36 : 2-8, 10 and 12-18 illustrated here, see also :
GASCHE 1991, fig. 6 = *NAPR* 6, Pl. 7 : 12.
*NAPR* 6, Pls. **7** : 9, 10, 13, and **9** : 7, 8, 9.

*Southern Alluvial Plain*

*Isin* : besides Pl. 37 : 1-3 and 14 illustrated here, see also :
*Isin* 2, Pl. 31 : 24-26 and 28.
*Larsa* : besides Pl. 37 : 15 and 18 illustrated here, see also :
PARROT 1968, fig. 14 : L.444 and L.449.
*Nippur* : besides Pl. 37 : 4-8, 10-13 and 16-17 illustrated here, see also :
FRANKE 1978, fig. 62 : 11.
*OIP* 78, Pl. 97 : 9-10.
*OIP* 111, Pls. **72** : c-d, f, h-i, k-l, n-p, **73** : a-f, h-l, n-o, **74** : c, e-h, j, and **86** : a-c.
*Warka* : *AUWE* 1, Pls. **35** : 242-244, 247-249, 257-258, **58** : 243A (photo) and **82** : 66.
FINKBEINER 1985, fig. 20 : 35-36.

*Middle Euphrates*

*Mari* : PONS and GASCHE 1996, fig. 1 : 3, 5 and 7.
*Tell al-'Usiyeh* : FUJII *et al*., 1984-85, fig. 6 : 25.

*Balikh Basin*

*Tell Sabi Abyad* : AKKERMANS and ROSSMEISL 1990, possibly fig. 9 : 23 and 24 for a North Syrian/Assyrian variant.

*Diyala Basin*

*Tell Haddad* : BURHAN SHAKIR SULAIMAN 2003-04, 105, fig. 2 : 281 and 303.
*Tell Imlihiye* : BOEHMER and DÄMMER 1985, Pl. 29 : 35-42, some with weak carination.
*Tell Zubeidi* : besides Pl. 37 : 22 illustrated here, see also :
BOEHMER and DÄMMER 1985, Pls. **105** : 1-2, 4-6, **115** : 160-161, 163-166, 168-175 (drawings) and **136** : 164A (photo).

*Gulf*

*Bahrain Cemeteries* : DENTON 1994, fig. 4 : IB.
*Failaka* : HØJLUND 1987, 80, type 69. Note that this vessel fig. 313 (p. 80) is very similar in profile to vessels of our Group 20 G 1, which belong to the 17th and 16th centuries ; see especially our Pl. 35 : 10 and 16.
*Qala'at al-Bahrain* : besides Pl. 37 : 24-25 illustrated here, see also :
HØJLUND and ANDERSEN 1997, figs. 208-210 and 212.

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*Western Iran*

*Tepe Guran* : THRANE 2001, Pl. 31 : 10 and 11 = PONS and GASCHE 2006, fig. 2 : 4 and 3 respectively.

*Susiana*

*Susa* : GASCHE 1973, Pl. 4 : 13. This bowl is a possible Susa variant of Group 20 H $_1$ dated around 1400 BC.

## Group 20 I (Pl. 38 : 1-15)

Group 20 I consists of well-made medium-sized bowls with carination. Above the carination the bowls' sides are tall and everted and have rounded rims. Only one example from northern Babylonia has a ring base (Pl. 38 : 10), and the possibility of flat, string-cut bases cannot be excluded.

Within Babylonia Group 20 I has been found only at Tell ed-Dēr in the Northern Alluvial Plain, where it is attested from the latter part of the 20th century until the end of the 19th.

This group of bowls almost certainly came into northern Babylonia from the Middle Euphrates, where similar bowls, also dated to the 20th and 19th centuries, have been found in large numbers at Mari. Like their northern Babylonian counterparts these are well shaped and well finished; they have finished disk bases. The photo of Plate 38 : 15 shows the non-Babylonian burnished surface on the bowls from Mari, including on the base.[153] Other examples have been found in central Syria and the Diyala Basin.

*COMPARANDA*

*Central Syria*

*Tell Maṣin* : DU MESNIL DU BUISSON 1935, Pl. 50 : left column, third from top.

*Middle Euphrates*

*Mari* : besides Pl. 38 : 14-15 illustrated here, see also : PONS 1999a, Pl. 18 : 1-3, 5-8 and 10.

*Diyala Basin*

*Tell Owessat* : JAKOB-ROST *et al.* 1983, fig. 47.

## Group 20 J $_2$ (Pl. 38 : 16-28)

The well-finished bowls of Group 20 J $_2$, with simple rims and ring bases, have the appearance of being carinated, and since this is certainly true for many examples, the group as a whole has been included in Family 20, although the sides of some examples curve upward (e.g., Pl. 38 : 25 and 27). The appearance of a carination is provided by a large horizontal ridge, roughly triangular in section, that encircles the bowl just above the midpoint of the body.

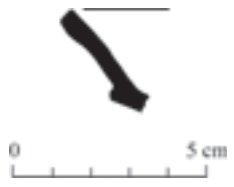


Fig. 3. Fragment of a possible Group 20 J $_2$ bowl from the Southern Alluvial Plain.
Umm al-Hafriyat : 96, A, Level II, ø rim : - .

Group 20 J $_2$ is a northern Babylonian form, attested from the 19th through 17th centuries. Sherds from Umm al-Hafriyat in the Southern Alluvial Plain (fig. 3), dated to the 18th century, may be from vessels belonging to this group, leaving open the possibility that there may also have been some limited production of Group 20 J $_2$ in the South.

## Group 20 K (Pl. 39 : 1-17)

Group 20 K represents a medium-sized, thick-walled bowl with a moderately high carination and a thickened rim that is either horizontal, outwardly beveled or rounded. The sides of this bowl flare outward to the well-marked carination, above which they extend vertically or nearly vertically to the thickened rim. Middle Euphrates examples have ring bases (Pl. 39 : 11 and 13), as does one from Nippur (see *Comparanda*). Based on the evidence of the sherds, these bowls are deep, and they have substantial rim diameters, ranging between 250 and 320 mm.

This group is attested in the Northern Alluvial Plain in the 20th and 19th centuries. It is also attested in the Southern Alluvial Plain. It is found in the Upper Diyala Basin during the 20th century and along the Middle Tigris, as well.

Group 20 K is well attested in the Middle Euphrates, between roughly the 20th and the 17th centuries, but rim diameters there can reach more than 400 mm.[154] Examples with smaller rim diameters are also present (Pl. 39 :13-14), and these most closely resemble the examples from Babylonia proper. Due to its relatively large diffusion along the Euphrates, the Habur Basin and Central Syria, it is probable that Group 20 K originally entered Babylonia from Syria through the Middle Euphrates region. Within the Alluvial Plain the group is also strongly present in northern Babylonia.

Group 20 K and the 20th-century examples of Group 20 L may properly be considered as close variants of one another.

*COMPARANDA*

*Northern Alluvial Plain*

*Sippar (Abu Habbah)* : *Sumer* 54, Pl. 62 : 7, 12.

*Tell ed-Dēr* : besides Pl. 39 : 1-6 illustrated here, see also : *TD* 4, Pl. 10 : 10 (with an outwardly thickened beveled rim) and 11 ; probably also Pl. 12 : 6.

*Southern Alluvial Plain*

*Nippur* : besides Pl. 39 : 7-10 illustrated here, see also : *OIP* 78, Pl. 83 : 1 (ring base). *OIP* 129, Pls. **83** : 7 (very Late Akkadian) and **93** : 1 and 6 (very Late Akkadian-Ur III).

*Warka* : VAN ESS 1991a, 94, Pl. 107 : 22b.[155]

*Central Syria*

*Ansari (Aleppo)* : SULEIMAN and GRITSENKO 1987, Pl. 1 : 40.

*Tell Mardikh* ; DAVICO and MATTHIAE 1967, figs. **11** : 13 and **12** : 6, 7 and 11.

*Hama* : FUGMANN 1958, fig. 120 : 2D216.

*Qatna* : DU MESNIL DU BUISSON 1930, Pl. 34 : column 7, No. 24 (from burial 1).

*Tell Tuqan* : MATTHIAE 1979, fig. 4 : 5-7.

*Middle Euphrates*

*Habuba Kabira* : STROMMENGER 1971, fig. 9 : 11.

*Harrâdum* : besides Pl. 39 : 11 illustrated here, see also : *Haradum* 1, fig. 116 : 6-9. SABAH JASIM ABDUL-AMIR 1988, fig. 93 : 2.

*Mari* : besides Pl. 39 : 12-15 illustrated here, see also : PONS 1999a, Pls. **21** : 3-4, 6-7, **22** : 1-4, 6, 8-10 and **23** ; second half 20th - first half 17th c. *Id.* 1999b, fig. 8.

*Tell al-'Usiyeh* : SABAH JASIM ABDUL-AMIR 1988, fig. 90 : 2.

*Tell Bi'a* : EINWAG 1993, figs. **4** : 17, 21 and **5** : 7-14.

*Tell Hadidi* : possibly DORNEMANN 1979, figs. **22** : 22 and **23** : 15 and DORNEMANN 1992, figs. **15** : 25, 27, 29 and **20** : 21. >

153 The rim of the bowl in Plate 38 :15 is lower than the typical rims of Group 20 I. We have used the photos of this vessel, despite its atypical rim, because they are the best available for illustrating the surface finish of these bowls.

154 PONS 1999a, Pl. 23 : 7.

155 VAN ESS 1991a, Pl. 107 : 22a is a smaller variant of Group 20 K.

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*Habur Basin*

*Chagar Bazar* : McMAHON and QUENET 2007, Pl. 3,14 : Types MO/14A and MO/15B.
*Tell al-Hamīdīya* : EICHLER *et al.* 1985, Pls. **9** : types 49-50 and **10** : type 54.

*Middle Tigris Basin*

*Assur* : DITTMANN 1997-98, fig. 10 : 6.

*Diyala Basin*

*Tell Asmar and Khafajah* : *OIP* 63, Pl. 170 : C.142.310.
*Tell Halawa* : possibly GHASSAN 1995, Pl. 104 : 290.

## Group 20 L (Pl. 40 : 1-18)

Group 20 L represents a medium-sized, thick-walled bowl with a moderately high carination and an external ledge rim that is either outwardly beveled or horizontal. Whole profiles have not been found, so the bases for this group remain unknown.

Among the earlier examples of Group 20 L (Pl. 40 : 13-18), dating to the 20th century, a relatively short side extends vertically upward from a well-marked carination to the rim. These earlier examples resemble the approximately contemporary shapes of Group 20 K, and they could arguably be classified together. The primary distinction between the two groups is the shape of their rims. The rims of Group 20 L have a horizontal or outwardly beveled ledge instead of merely being thickened, though the sherds illustrated in Plates 39 : 2 and 40 : 17 are not far from one another in shape.

The later examples of Group 20 L (Pl. 40 : 1-12), which have no counterparts in Group 20 K, date to the 19th and 18th centuries. They tend to have longer sides above the carination, and these longer sides extend vertically or flare outward to the ledge rim. The sides are sometimes decorated with horizontal ridges and/or grooves (Pl. 40 : 3, 7-8 and 12). The upper surfaces of the rim ledges may also be incised with concentric grooves (Pl. 40 : 7 and 12).

Group 20 L has been found in the Northern Alluvial Plain in contexts dating from the 20th century down to around 1750. Examples have also been identified in 20th-century contexts at Nippur in the South and later at Larsa (mid-17th century). Additional examples have been reported from the Diyala Basin and the Gulf.

*COMPARANDA*

*Northern Alluvial Plain*

*Tell ed-Dēr* : besides the bowls illustrated here on Pl. 40, see also : *TD* 4, Pl. 10 : 10-11.

*Southern Alluvial Plain*

*Larsa* : CALVET 2003, fig. 66 : 59.91.

*Diyala Basin*

*Tell Genj* : WILSON-BRIGGS *et al.* 1984, Pl. 8 : 2-3.
*Tell Madhhur* : MOON and ROAF 1984, fig. 11 : 16 and 17.

*Gulf*

*Barbar (Bahrain)* : ANDERSEN and HØJLUND 2003, possibly fig. 522 but with a smaller rim diameter (about 110 mm).
*Failaka* : CALVET 1984, 65, fig. 29 : 87.

# FAMILY 25

Family 25 consists of vessels with a carination below the midpoint of the body, and steeply inclined, slightly flaring sides. The bowls in this family are frequently decorated with designs in black paint.

## Group 25 $A_1$ (Pl. 41 : 1-2)

Group 25 $A_1$ includes small, deep bowls with a low carination and steeply inclined, slightly flaring or nearly vertical sides. Sometimes the carination is lacking (Pl. 41 : 2). There is a horizontal incision or groove below the rounded or thickened, horizontal rim. The base is flat, presumably string-cut. Both painted and unpainted examples are attested. This group represents a variant of the much more numerous, ring-based Group 25 $A_2$ (Pls. 41 : 3-42 : 11).

Group 25 $A_1$ is attested in the Southern Alluvial Plain and can be dated to the 17th century, the era of Hammurabi and Samsuiluna.[156] An unpainted string cut bowl was also found by Taha Baqir and Mohammed Ali Mustafa in their excavations at Tell ed-Dēr but the drawing we did in the Iraq Museum has been lost [157]. The group has also been found in the Lower Diyala Basin.

*COMPARANDA*

*Southern Alluvial Plain*

*Isin* : *Isin* 3, probably Pl. 28 : 2.
*Larsa* : CALVET 2003, possibly fig. 60 : 59.19.

*Diyala Basin*

*Tell Muhammad* : AMEL METAB 1989-90, 152, fig. 11 : 2 (unpainted).

## Group 25 $A_2$ (Pls. 41 : 3 to Pl. 42 : 11)

Group 25 $A_2$ includes small, deep bowls with a low carination and steeply inclined sides. These bowls have ring bases. There is usually a horizontal incision below the rounded or thickened, horizontal rim. In deeper examples a true carination is sometimes lacking (Pl. 41 : 4-5, 8 and 19, and Pl. 42 : 4-5) and the rim is often out-turned (Pl. 41 : 4-5 and 8-9, and Pl. 42 : 4-5) ; on some of the deeper bowls there is also a small ridge below the rim (Pl. 41 : 8-9 and Pl. 42 : 4-5). The deeper bowls also tend to have more sinuous sides (Pl. 41 : 4-5 and 8-9, and Pl. 42 : 4-5 and 9), and their profiles approach those of the bowls in Group 30 $A_2$ (Pls. 43-44).

Most of the bowls of this group are painted with designs in black-to-dark brown paint, though some examples, particularly earlier ones, are unpainted.[158] On the painted examples, the decoration is generally rather cursorily applied.

The earliest attestations of Group 25 $A_2$, all unpainted, can be dated to the end of 18th century in northern Babylonia (Pl. 41 : 18-20). The earliest painted example comes from a Nippur context dated to the beginning of the 17th century (Pl. 42 : 11). The group as a whole is highly diagnostic for the 17th century, that is, for the reigns of Hammurabi and Samsuiluna, in both northern and southern Babylonia, and it probably continued to be produced at the beginning of the 16th century in northern Babylonia. At the time of Area E, *Ensemble* III at Tell ed-Dēr, around the middle of the 16th century, only fragments are found in the archaeological record, and vessels of this group were almost certainly no longer being made (Pl. 41 : 3-7 ; see GASCHE 1989, 81).

*COMPARANDA*

*Northern Alluvial Plain*

*Kish* : DE GENOUILLAC 1924, Pl. XX : 5 = Pl. 55 : 156.
*Tell ed-Dēr* : besides Pl. 41 : 3-20 illustrated here, see also : *MHEM* 1, Pls. **27** : 26-27, probably 29, and 30-31, and **29** : 9.

*Southern Alluvial Plain*

*Larsa* : BACHELOT and CASTEL 1989, fig. 23 : 1 and 4. CALVET 2003, figs. **47** : 27.76, **52** : 27.100, **63** : 59.148 and **66** : 59.88. >

156 Plate 40 : 2, from Warka, has an uncertain stratigraphic provenience (VAN ESS 1988a, 375, No. 59) ; we have placed it in the 17th century on the basis of its shape.

157 IM 48944. Height : 65 mm ; ø base : 60 mm; ø rim : 127 mm.

158 In Area WB Level IV at Nippur (17th c.), 64% of sherds from 129 different vessels belonging to Groups 25 $A_2$, 25 $A_1$ and the related 30 $A_2$ were painted (J. Franke, pers. comm.).

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CALVET *et al*. 2003, figs. **18** : h and **32** : e (= PARROT 1968, fig. 17), f and g (all exc. Parrot 1967).
*Nippur* : besides Pl. 42 : 5, 7-8 and 11 illustrated here, see also : *OIP* 78, Pl. 88 : 21, unpainted.
*Warka* : VAN ESS 1991a, 96, Pl. 109 : 52.

## FAMILY 30

Family 30 includes deep vessels, frequently having sinuous profiles. Only one group is represented, Group 30 A 2.

### Group 30 A 2 (Pls. 43 : 1 to Pl. 44 : 11)

Group 30 A 2 is made up of small to medium-sized, deep vessels with sinuous, more-or-less S-shaped profiles. They typically have a ring base. In a few examples (Pl. 44 : 2) a carination replaces the lower outward curve of the "S" (cf. Pl. 42 : 9 in Group 25 A 2). The upper inward curve found on most of these vessels produces a neck-like constriction. Just below the narrowest point of this constriction there is either a horizontal ridge or an extremely narrow ledge on the vessel exterior, which is created by an abrupt thinning of the vessel wall at that point. These ridges and ledges serve to create the impression of a shoulder. The rims are everted and/or outwardly thickened, and are generally either horizontal or outwardly beveled. Some vessels in this group, those that least resemble the basic shape (e.g., Pl. 44 : 2), are similar to examples from Group 25 A 2, except that they are larger and deeper. There seems to be a morphological continuum between the two groups, even though the most typical examples of each have different profiles. This sense that the groups go together is reinforced by the fact that most examples in both are painted with the same designs.

Though both painted and unpainted examples are found, the majority of vessels of Group 30 A 2 bear the same decorative patterns in black-to-dark brown paint that characterize Group 25 A 2.[159] The designs appear to have been painted quickly and generally were not carefully done.

The earliest attestations of Group 30 A 2 in the Northern Alluvial Plain can be dated to the middle of the 17th century, and the group apparently continued to be produced in the early part of the 16th century. By the time of Ammiṣaduqa it seems to have disappeared (GASCHE 1989, 82). In the Southern Alluvial Plain, Group 30 A 2 is well-attested during early and middle 17th century.[160] Like Group 25 A 2, Group 30 A 2 is characteristic of the period of Hammurabi and Samsuiluna.

*COMPARANDA*

*Northern Alluvial Plain*

*Sippar (Abu Habbah)* : *Sumer* 54, Pls. **54** : 3, 4 and **55** : 4.
*Tell ed-Dēr* : besides the vessels illustrated here on Pl. 43, see also : *MHEM* 1, Pl. 29 : 2, 7 et 15-17. *TD* 1, Pl. 21 : 13.

*Southern Alluvial Plain*

*Isin* : besides Pl. 44 : 6 illustrated here, see also : *Isin* 3, Pl. 29 : 12.
*Nippur* : besides Pl. 44 : 1-5 and 9 illustrated here, see also : FRANKE 1978, fig. 59 : 3b.
*Isin* possibly AYOUB 1982, 113, Type 63 : 23B (flat base)
*Larsa* : besides Pl. 44 : 7-8 and 10-11 illustrated here, see also : BACHELOT and CASTEL 1989, fig. 23 : 5. CALVET *et al*. 2003, figs. **17** : probably a, e and g, **18** : i to n, o and **32** : h, i (exc. Parrot 1967).

159 See also fn. 158.

160 The shape and decoration of a vessel from Mari *may* been derived from vessels belonging to Group 35 A 2 (PARROT 1959, 131, fig. 90, No. 786). However, its shape is sufficiently different for it to have been excluded from this group.

## FAMILY 35

Family 35 consists of deep, wide-mouthed open vessels that were often used for the burial of infants. There is only one group, Group 35 A 2.

### Group 35 A 2 (Pl. 45 : 1 to Pl. 47 : 7)

Group 35 A 2 represents medium-sized vessels of approximately equal height and width, usually having ring bases, though one illustrated example (Pl. 46 : 1) has a finished flat base.[161] The convex sides usually curve slightly inward to the rim.[162] The rims are thickened and outwardly beveled or have the form of exterior horizontal ledges. Examples are often decorated with one or more horizontal ridges and/or grooves. Vessels of Group 35 A 2 frequently served as burial jars for infants.

Group 35 A 2 is well attested in the Northern Alluvial Plain between the 18th and 16th centuries. In the South examples have been found in 18th- and 17th-century contexts.[163] This group is also found in the Diyala Basin in the 17th and 16th centuries. It is present in the Habur Basin, as well.

*COMPARANDA*

*Northern Alluvial Plain*

*Kish* : LANGDON 1924, Pls. **35** : 3, center and **32** : 1, right.
*Sippar (Abu Habbah)* : AL-JADIR 1987, 200, illustr. 2 (photo). *Sumer* 54, Pl. 57 : 1-5 and 7-8.

*Southern Alluvial Plain*

*Isin* : besides Pl. 46 : 6 and 7 illustrated here, see also : *Isin* 2, Pl. 32 : 41-42 and *Isin* 3, Pl. 27 : 7 (IB 1369).
*Larsa* : CALVET 2003, figs. **47** : 27.64, **49** : 27.528 = Pl. 36 : a (painted), **58** : 27.545, **68** : 59.119 and **70** : 59.109.[164] CALVET *et al*. 2003, fig. 23 : d.
*Mashkan-shapir* : STONE and ZIMANSKY 2004, fig. 50 : AbD 90-752.
*Nippur* : besides Pls. **45** : 9, **46** : 8 and **47** : 1-2, 4 illustrated here, see also : FRANKE 1978, fig. 61 : 2a and b. *OIP* 78, Pl. 89 : 7-10, No. 8 (taller than usual).

*Habur Basin*

*Tell Leilan* : WEISS *et al*. 1990, figs. **15** : 8 and **21** : 5.

*Diyala Basin*

*Tell ed-Dhiba'i* : AL-GAILANI 1965, Pl. 1 : 10. KHALID K. HAMMOUDI 1989-90, 100, left illustr., bottom. MUHAMMAD M. SHAKIR *et al*. 1984, illustr. on p. 62 (top) and on p. 66.
*Tell Muhammad* : AMEL METAB 1989-90, 149, fig. 7 : 1-3.
*Tell Yelkhi* : besides Pl. 47 : 6-7, illustrated here, see also : GABUTTI 2002-03, Pl. 48 : 1 and 4-5.

## FAMILY 40

Family 40 includes neckless, wide-mouthed vessels with a high maximum diameter. There is only one group, Group 40 A 2.

### Group 40 A 2 (Pl. 48 : 1-8)

Group 40 A includes deep vessels generally with outward flaring sides that curve sharply upward and frequently also inward. On sufficiently preserved examples there is a short spout just below the rim. The rim itself is an outwardly beveled ledge,

161 Some vessels of this shape at Nippur are also reported as having flat bases (*OIP* 78, Pl. 89 : 5, Remarks).

162 Plate 45 : 5, with its outwardly flaring sides, is exceptional in this regard.

163 The walls of the vessels from the southern sites of Isin and Nippur are consistently drawn thicker than the walls of their counterparts from Tell ed-Dēr. This difference is probably more apparent than real, and is almost certainly due to the fact that the profiles from Tell ed-Dēr were cut (sawn) before being drawn, while those from Isin and Nippur were not.

164 Fig. 70 : 59.109 is most probably a vessel of Group 35 A 2 not a *bassin* as the legend indicates.

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which lies almost flush against the side of the more incurved examples (Pl. 48 : 2 and 7). The limited number of whole profiles belonging to this group all have ring bases. The size of these vessels varies greatly, with rim diameters ranging from 180 to 440 mm and heights between 126 and 330 mm. One example from the 17th century (Pl. 48 : 2) is decorated with the geometric designs in dark paint that are typical on other vessels of this time period.[165]

Group 40 A 2 has been found in the Northern Alluvial Plain in contexts dating between the middle of the 19th century and the end of the 17th. In the South it is attested between the 19th and 17th centuries. It is also present in the Diyala around 1800.

Because of the similarity in the shapes of their rims, confusion is possible between sherds belonging to this group and the following Group 45 A 3.

*COMPARANDA*

*Southern Alluvial Plain*

*Tell Laham* : FUAD SAFAR 1949, possibly Pl. IV : 4.

*Diyala Basin*

*Tell Genj* : WILSON-BRIGGS *et al.* 1984, Pl. 4 : 3.
*Tell Owessat* : JAKOB-ROST *et al.* 1983, fig. 45B (sherd).

## FAMILY 45

Family 45 includes neckless vessels of hemispherical shape. There is only one group, Group 45 A 3.

### Group 45 A 3 (Pl. 49 : 1-8)

Group 45 A 3 includes small to medium-sized, approximately hemispherical vessels with curving sides and a sharply inturned rim that has the appearance of a low, flat collar around a holemouth opening. The two whole examples have convex (round) bases (Pl. 49 : 2 and 5). They appear to be smaller than most of the fragmentary examples. The larger fragmentary vessels were probably more fragile; it is possible that they had different bases. It is also possible that some of the larger rims belong to the ring-based Group 40 A 2 (see Pl. 48 : 2 and 7).

This minor group had a long life. It is attested from the mid-19th to the mid-16th centuries in the Northern Alluvial Plain. An unpublished fragmentary rim from Umm al-Hafriyat and a smaller, less carefully made example from Nippur (see *Comparanda*) in the Southern Alluvial Plain may also belong to this group. These vessels may have served as cooking pots.

*COMPARANDA*

*Northern Alluvial Plain*

*Sippar (Abu Habbah)* : *Sumer* 54, Pl. 47 : 26-30.

*Southern Alluvial Plain*

*Isin* : *Isin* 3, possibly Pl. 30 : 4.
*Nippur* : *OIP* 78, possibly Pl. 90 : 7.

## FAMILY 50

This family consists of small to medium-sized vessels with short cylindrical necks. The base type is uncertain, though it is likely to be convex. There is one group, Group 50 A.

### Group 50 A (Pl. 49 : 9-14)

Group 50 A includes globular vessels with short, typically cylindrical necks and simple rounded rims. On 16th-century examples, the upper surfaces of the rims have been flattened slightly (Pl. 49 : 9-10). At the base of the neck there is consistently a single horizontal ridge. Though no whole shapes have been recovered, the bases, like those of the following Group 55 A 3, were likely convex. This group is attested in the Northern Alluvial Plain in the 17th and 16th centuries (Pl. 49 : 9-14). The similarity in shape with Group 55 A 3 suggests that the vessels in this group probably also served as cooking pots.

*COMPARANDA*

*Northern Alluvial Plain*

*Tell ed-Dēr* : besides Pl. 49 : 9-14 illustrated here, see also :
*TD* 2, Pl. 23 : 4.

## FAMILY 55

This family consists of small to medium-sized globular vessels with convex bases and short necks. There is one group, Group 55 A 3.

### Group 55 A 3 (Pl. 49 : 15 to Pl. 50 : 21)[166]

Group 55 A 3 includes globular vessels with convex bases. Their short necks, sometimes little more than a constriction of the clay at the rim, terminate in simple rounded or outwardly beveled rims. Beveled rims are more typically found on earlier examples (20th-18th centuries) ; they are not found at all on later ones, (17th-16th centuries). There is a significant variation in size between the largest (260 mm high) and smallest (90 mm high) members of the group.

The globular, wide-mouthed shape of Group 55 A 3 is what would be expected for a kitchen vessel, and at least some of these vessels were certainly used as cooking pots. The examples from Mari on the Middle Euphrates (Pl. 50 : 20a-c [photos only] and 21 [drawing only]) illustrate the characteristics of a cooking pot. They were low-fired of coarsely levigated clay to make them less likely to shatter if they were set in a fire, and they show obvious signs of having been in a fire. The lower part of the bodies is black with soot. On the bottom of the vessels, where the heat was greatest, the soot has burned away. The clay fabric has begun to disintegrate from having been repeatedly placed on the fire. The bottoms are in very fragile condition, and if the pots had continued to be used, they would have soon fallen apart. Plate 50 : 20 was "retired" and placed in a grave instead ; as a result, it survived intact. Cooking pots were likely used until their bottoms fell out (see Pl. 50 : 11), so there are very few whole examples.

Plate 50 : 13, Plate 50 : 20 and a vessel similar to that shown in Plate 50 : 18[167] were found in burials, as well. Plate 50 : 13 also held a tablet dated to the reign of Sîn-iddinam of Larsa (1754-1748).[168]

This utilitarian shape was also used during the 3rd millennium, as the *Comparanda* indicate (see in particular the entries for Abu Qubur, Abu Salabikh, Nippur, Tell Asmar and Khafajah). In the 2nd millennium Group 55 A 3 is attested from the 20th century to the 16th in the Northern Alluvial Plain. In the South it extends from the 20th century to the 17th. The group is also found in the Middle Euphrates.

*COMPARANDA*

*Northern Alluvial Plain*

*Abu Qubur* : DE MEYER and GASCHE 1986, fig. 8 : 31.
*Tell ed-Dēr* : besides the vessels illustrated here on Pls. 49 and 50, see also :
*TD* 1, Pl. 21 : 11 and 12. >

165 This group may be the continuation of a spouted Akkadian/Ur III vessel sometimes called a "milk bowl" (e.g., GIBSON 1972b, fig. 34 : Akkadian, B-C).

166 Because of space constraints this group is arranged differently from the other groups : the latest examples, shown on Plate 49, precede the earlier ones on Plate 50.

167 *OIP* 78, Pl. 90 : 4, Remarks.

168 Excavation records of the al-Hiba Expedition.

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*TD* 4, Pl. 14 : 10 and probably 12 and 13.

*Southern Alluvial Plain*

*Abu Salabikh* : POSTGATE and MOON 1984, 73, figs. **9**-**12** and p. 78, figs. **44**, **46** and **47**.
*Larsa* : CALVET 2003, figs. **47** : 27.70 and **54** : 27.35. CALVET *et al*. 2003, fig. 19 : b-d.
*Nippur* : besides Pl. 50 : 9-10, 12, 14 and 16-19 illustrated here, see also : *OIP* 78, Pl. 83 : 21. *OIP* 129, Pl. 98 (ED III-Ur III).
*Telloh* : DE GENOUILLAC 1936, Pl. XXX : 2800.
*Warka* : besides Pl. 50 : 11 illustrated here, see also : *AUWE* 10, Pl. 17 : c-d. VAN ESS 1993, fig. 13 : 168-169.

*Middle Euphrates*

*Harrâdum* : SABAH JASIM ABDUL-AMIR 1988, fig. 93 : 9.
*Mari* : besides Pl. 50 : 20-21 illustrated here, see also : LEBEAU 1987, possibly Pl. 5 : 4-9. PONS 1999a, Pls. **38** : 1, 2 (= *id*. 1999b, fig. 11 : 1), 3, 4 and 5 (= *id*. 1999b, fig. 11 : 2) and **39** : 1-2, 4 and 6.

*Diyala Basin*

*Tell Asmar* : *OIP* 63, Pl. 158 : B.543.520 and Pl. 187 : C.654.520.
*Khafajah* : *OIP* 63, Pl. 158 : B.544.540.

## FAMILY 60

Family 60 consists of one family of neckless globular to ovoid vessels characterized by the presence of a rim with a concave upper edge below which are multiple holes.

### Group 60 A (Pl. 51 : 1-12)

Group 60 A includes vessels characterized by a rim with a concave upper edge, shaped to receive and hold a cover (an upside-down bowl, see fig. 4). This is essentially a neckless holemouth form. The bodies appear to range from globular to ovoid in shape. Some examples have a rounded shoulder and a relatively high maximum diameter (Pl. 51 : 5 and 11, and fig. 4). The single whole ovoid profile, with a lower maximum diameter, is shoulderless. The bodies can be decorated with multiple horizontal grooves (Pl. 51 : 1-2, 5, 8-9 and 11), one or more broad wavy-line incisions (Pl. 51 : 5, 8 and 11-12) and applied rope decoration (Pl. 51 : 5). Only the upper part of the vessel body has been identified among the sherds, but the whole vessels thus far attested have a ring bases (Pl. 51 : 8 and fig. 4).

The walls of these vessels are pierced through by one or more small openings close to the rim, though these are not preserved on every sherd. Sometimes these openings are in the form of spouts, (fig. 4 has four such spouts). As is the case with Plate 51 : 6 and 8, these openings can also be bored through small attached knobs of clay that are reminiscent of lug handles.

These vessels appear to have been used for cooking. The concave upper edge of the rim permitted a covering bowl to be seated securely into the rim of the jar. The openings seem to have functioned as valves, allowing steam to escape when such a covered pot was heated over a fire. When found, the covered pot in fig. 4 was serving as an infant burial jar.[169] However, traces of soot were found on its lower body, evidence that it had previously been placed over a fire, and it is likely to have been a reused cooking pot.

Sherds from this group have been found at Tell ed-Dēr in northern Babylonia, dating from the end of the 18th century through the 16th. In the South, two whole vessels have come from the Sînkāšid Palace at Warka,[170] one of which is shown here as Plate 51 : 8. These can be dated to the 17th century, as can the two examples from Nippur. The examples from the Diyala Basin, which are almost identical to those from northern Babylonia, date to the latter part of the 17th century and the early 16th century. The Susa vessel illustrated in fig. 4 belongs to the middle of the 17th century.

*COMPARANDA*

*Southern Alluvial Plain*

*Mashkan-shapir* : STONE and ZIMANSKY 2004, fig. 50 : Lot # 1846.
*Warka* : VAN ESS 1988a, fig. 21 : 141.

*Diyala Basin*

*Tell Ajamat* : ARMSTRONG 1981, Pl. 115 : 58 (12th-11th century context).

*Susiana*

*Susa* : GHIRSHMAN 1967, 12, fig. 29 : top left (present fig. 4).

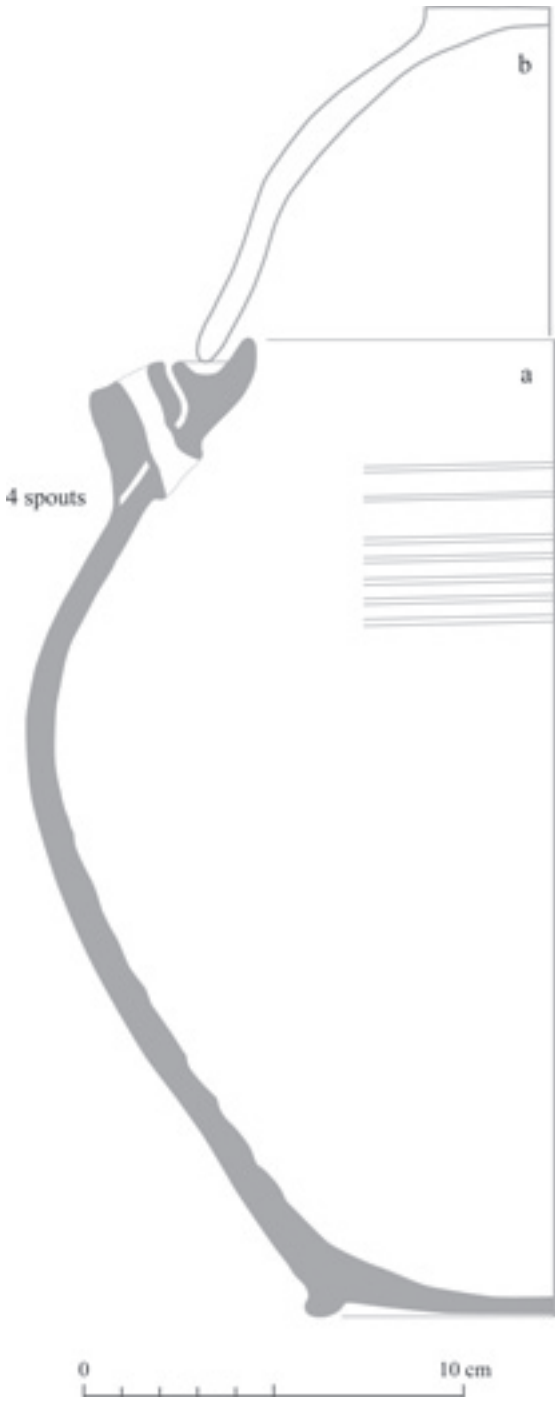


Fig. 4. Group 60 A vessel with a concave upper edge (a) covered by a bowl (b).
Susa : GS-5983, A, Level XV, *jaunâtre*, ø rim : 200. Burial S.268 dug from Level XV, probably from its final stage.

169 Unpublished Burial S.268 dug from late Level XV of *Chantier* A at Susa ; for an illustration of the pot *in situ*, see GHIRSHMAN 1967, 12, fig. 29 : top left.

170 VAN ESS 1988a, fig. 21 : 141-142.

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## FAMILY 65

This large family includes small cups with string-cut, ring or slightly convex (rounded) bases and generally tapered, often flaring simple rims. Profiles are vertically oriented, that is, they are taller than they are wide ; sides are straight, moderately flaring, concave or slightly curved.

### Group 65 A 1 (Pl. 52 : 1-17)

Group 65 A 1 consists of small, narrow, vertically oriented vessels with moderately flaring, sometimes curved, sides. Bases are flat and string cut ; the rims are rounded or tapered and sometimes flare outward slightly. Examples from northern Babylonia tend to have a low carination just above the base, where the side has been sharply turned upward (e.g., Pl. 52 : 6 and 8-13). Northern examples of the 16th century (Late Old Babylonian Period) and all examples from southern Babylonia and the Diyala show a smoother transition from base to side. Most examples are of medium height, around 10 to 12 cm high ; a few are smaller, between 6 and 7 cm high (Pl. 52 : 5 and 15). Two examples from Nippur are decorated with a band of black or brown paint around the rim (Pl. 52 : 14 and 16). Based on their contexts these two examples can be dated to the 17th century, when a number of common vessel forms were decorated with designs in dark paint.

Group 65 A 1 has been found in the Northern Alluvial Plain in contexts assigned to the 17th and 16th centuries. In the Southern Alluvial Plain and in the Diyala Basin it is attested in the 17th century. It is also present in the Gulf.

*COMPARANDA*

*Northern Alluvial Plain*

*Kish* : DE GENOUILLAC 1924, Pl. X : 2 = Pl. 50 : 132 = Pl. 52 : 132.
*Id.* 1925, Pl. XIX : 1 = Pl. 53 : 3.
*Sippar (Abu Habbah)* : *Sumer* 54, Pls. 55 : 1, 3 and 4.
*Tell ed-Dēr* : besides the vessels illustrated here on Pls. 52, see also : *TD* 1, Pl. 16 : 2-3 and 5-10.
*MHEM* 1, Pl. 30 : 2-3 and 6-14.

*Southern Alluvial Plain*

*Nippur* : besides Pl. 52 : 14 and 16 illustrated here, see also : *OIP* 78, 95 : 18 (small, with geometric decoration). FRANKE 1978, fig. 59 : 4a.
*Warka* : besides Pl. 52 : 15 illustrated here, see also : VAN ESS 1988b, fig. 4 : 12.

*Diyala Basin*

*Ahmed al-Mughir* : ARMSTRONG 1981, Pl. 112 : 38-39.
*Tell Haddad* : BURHAN SHAKIR SULAIMAN 2003-04, 107, fig. 6 : 499.
*Tell Halawa* : GHASSAN 1995, Pl. 63 : 51.

*Gulf*

*Bahrain Cemeteries* : DENTON 1994, fig. 16 ; the carination lies higher than on Alluvial Plain examples.

### Group 65 B 1 (Pl. 53 : 1-9)

This group includes small cups having generally straight and vertical, or nearly vertical, sides and flat, string-cut bases. Rims flare outward slightly and are rounded or tapered. Sides and bases are sometimes set off from one another by a low carination close to the base (e.g., Pl. 53 : 2 and 8). Plate 53 : 9 is decorated with parallel horizontal grooves around the middle of the body.

Most examples come from 17th-century Babylonia, both northern and southern. Earlier southern Babylonian examples, from the 19th and 18th centuries, sometimes have the low carination between base and body that is characteristic of Groups 65 C 1 and 65 C 2 (see Pl. 53 : 8). The group is also attested in the Middle Euphrates, the Diyala Basin and the Gulf.

*COMPARANDA*

*Northern Alluvial Plain*

*Babylon* : REUTHER 1926, 9, fig. 2 : d.
*Kish* : DE GENOUILLAC 1924, Pl. III : 2 (= Pl. 51 : 13) et 3 (= Pl. 51 : 38).
*Id.*, 1925, Pls. **XVIII** : 1 (first and fifth from left on lower row) and 3 (third from right), **XIX** : 1, and **56** : 1 and 3.

*Southern Alluvial Plain*

*Abu Salabikh (southern edge of the Hor al-Hammar)* : ROUX 1960, Pl. 4 : c, 4
*Larsa* : besides Pl. 53 : 7 illustrated here, see also : CALVET 2003, figs. **47** : 27.60 and **64** : 59.81. CALVET *et al.* 2003, fig. 16 : b.
*Nippur* : besides Pl. 53 : 3, 5-6 and 8 illustrated here, see also : *OIP* 78, Pls. 95 : 5 and possibly Pl. 96 : 1.
*Warka* : besides Pl. 53 : 4 illustrated here, see also : VAN ESS 1988b, fig. 4 : 10.
*Ur* : WOOLLEY and MALLOWAN 1976, type 78a.

*Middle Euphrates*

*Harrâdum* : *Haradum* 1, fig. 87 : 5.

*Diyala Basin*

*Tell ed-Dhiba'i* : MOHAMMAD ALI MUSTAFA 1949, Pl. IV : 7.
*Tell Haddad* : BURHAN SHAKIR SULAIMAN 2003-04, 107, fig. 6 : 603 and probably fig. 7 : 706 (close to our Pl. 53 : 3).
*Tell Muhammad* : AMEL METAB 1989-90, 150, fig. 9 : 9. AMEL METAB and HUSSAIN A. HAMZA 2003-04, 277, fig. 9 : left.

*Gulf*

*Failaka* : HØJLUND 1987, figs. 363 and 365 ; see also fig. 364 with a thicker base.

### Group 65 C 1 (Pl. 53 : 10-16)

Group 65 C 1 is made up of cups with concave sides and a low, more-or-less sharp carination just above the base. The base itself is flat and string cut. Occasionally examples are decorated with one or more horizontal grooves near the middle of the body (Pl. 53 : 12).

These cups are infrequently attested in the Northern Alluvial Plain between the 18th and 16th centuries. Somewhat more common are concave-sided cups with ring bases (Group 65 C 2). The concave-sided shape, with both ring and flat bases, was also produced in the nearby Middle Euphrates region during the 17th century, as well as the 16th. In the Diyala Basin, concave-sided cups appeared a little earlier than in Babylonia, toward the end of the 19th century,[171] and continued there until the early 16th century. Beyond the Diyala, these cups are also present to the north in the Middle Tigris Basin and farther east in Western Iran and in the Southern Zagros Piedmont. The distribution pattern of the *Comparanda* suggests that Group 65 C 1 is at home north and east of Babylonia. The group probably entered northern Babylonia from the Diyala Basin and/or farther north.

Group 65 C 1 can be seen as a variant of the ring-based concave-sided cup (Group 65 C 2).

*COMPARANDA*

*Southern Alluvial Plain*

*Isin* : see *Isin* 3, Pl. 26 : 14 (IB 1418) for a possible S. A. P. variant of Group 65 C 1.

*Middle Euphrates*

*Harrâdum* : *Haradum* 1, fig. 87 : 5.

*Middle Tigris Basin*

*Nuzi* : STARR 1937, Pls. **62** : S (different rim and very low carination), probably **62** : Y (sherd) and **76** : K (close to our Pl. 53 : 16), J and M (low carinations).
*Tell al-Fakhar* : YASIN MAHMOUD 1970, Pl. 20 : TF.659.
*Tell Basmusian* : BEHNAM ABU AL-SOOF 1970, Pls. **42** : 9 and **43** ; 6 (?) and 7.

*Diyala Basin*

*Ahmed al-Mughir* : ARMSTRONG 1981, Pl. 112 : 37-38. >

171 GABUTTI 2002-03, Pl. 61 : 20, from Level B VIa (late 19th c.)

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*Tell Imlihiye* : BOEHMER and DÄMMER 1985, 18, Pls. **54** : 284 and **57** : 284 (photo) ; burial 16, most probably from Isin-Larsa period. See also Pl. 54 : 283 (jar from the same burial) mentioned in the *Comparanda* of Group 270 E 3.
*Ishchali* : *OIP* 63, Pl. 153 : B.247.200.
*Khafajah* : *OIP* 63, Pl. 153 : B.237.200.
*Tell Ababra* : GHASSAN 1995, Pl. 114 : 339.
*Tell Asmar* : *OIP* 63, Pl. 153 : B.236.200c.
*Tell Bakr Awa (Shahrizor Plain)* : MUHAMMAD BAKIR AL-HUSAINI 1962, Table 6 : 9 (low carination).
*Tell Genj* : WILSON-BRIGGS *et al*. 1984, Pl. 5 : 6 (= GHASSAN 1995, Pl. 114 : 343) and 7 (= GHASSAN 1995, Pl. 114 : 346).
*Tell Halawa* : GHASSAN 1995, Pls. **59**, **60**, **61** : 41, **62** (all with a low carination ; on Pl. 62, the cups have generally a large band of dark paint around the rim) and **147** : 556-566 (sherds with base).
*Tell Muhammad* : AMEL METAB and HUSSAIN A. HAMZA 2003-04, 277, fig. 9 : center.
*Tell Owessat* : JAKOB-ROST *et al*. 1983, fig. 30 = GHASSAN 1995, Pl. 114 : 340.
*Tell Songor A* : KAMADA and OHTSU 1981, fig. 38 : 10-11 = KAMADA and OHTSU 1988, fig. 15 : P.25-P.26.
*Tell Suleimah* : GHASSAN 1995, Pl. 114 : 342 and 344-345 (low carination).
*Tell Yelkhi* : besides Pl. 53 : 15-16 illustrated here, see also : GABUTTI 2002-03, Pl. 62 : 3 and the slightly smaller, late 19th-18th c. cups on Pl. 61 : 15-20.

*North Western Iran*

*Hasanlu* : for cups very close to Group 65 C 1 in NW Iran, see MUSCARELLA 1994, 141 and fig. 12.2 : 13-14 (Hasanlu VI, mid 18th-mid 15th c.).[172]

*Southern Zagros Piedmont*

*Pusht-i Kuh Cemeteries* : HAERINCK and OVERLAET 2010, 288-290, fig. 7 : 16.

## Group 65 C 2 (Pl. 54 : 1-9)

This group includes small cups having more-or-less concave-sides and low ring bases. The sides and bases are generally set off from one another by a low carination close to the bottom of the vessel. Added decoration occurs occasionally. Plate 54 : 4 has a single horizontal groove around the middle of the body (see also Pl. 53 : 12, with a flat base). Southern Babylonian examples, in particular, may have a band of dark paint around the rim (Pl. 54 : 6). Exceptionally, Plate 54 : 7, from the Middle Euphrates, is covered with horizontal red-painted bands from the rim to just above the low carination.

These ring-based cups appear in northern Babylonia during the 18th century. They are attested in the 17th century in both the North and the South. Ring-based cups are found in the Middle Euphrates during the 17th and 16th centuries. Though none are illustrated here, these cups also appear in the Diyala in the 18th and perhaps the early 17th centuries,[173] but ring bases are not attested on published concave-sided cups from Tell Yelkhi.

The available evidence indicates that concave-sided cups, with both ring and string-cut bases, were more common in the Northern Alluvial Plain and the adjacent peripheral areas than in the South. Concave sides are not completely unknown in southern Babylonia, but they are found there only after the early 17th century (Pl. 54 : 5-6).

Taking into account both Groups 65 C 1 and 65 C 2, the evidence we have suggests that concave-sided cups first appeared in the Diyala in the 19th century.[174] They entered northern Babylonia in the first half of the 18th century. A century later they came into the Middle Euphrates region with the Babylonians who settled Harrâdum,[175] and finally, around 1650, they also began to be made in southern Babylonia.

*COMPARANDA*

*Southern Alluvial Plain*

*Warka* : *AUWE* 10, Pl. 28 : a (short).

*Middle Euphrates*

*Harrâdum* : besides Pl. 54 : 7-9 illustrated here, see also : *Haradum* 1, fig. 87 : 4, 6, 8, 10-13 and 15-17.
*Tell al-'Usiyeh* : FUJII *et al*., 1984-85, fig. 6 : 12 = OGUCHI, K. & H. 2006, fig. 14 : g.
*Terqa* : PIC 1997, 164, and fig. 4 : 29-30.

*Middle Tigris Basin*

*Nuzi* : STARR 1937, Pls. **62** : T, X (different rim [T] and different carinations [T and X]), **63** : A and **76** : I.
*Tell Billa* : SPEISER 1933, Pl. 57 : 2.
*Tepe Gawra* : SPEISER 1935, Pl. 73 : 190 (Strata IV-1). This shape belongs to Group 65 C 2 in the 18th-17th centuries ; Pl. 73 also shows later pottery.

*Diyala Basin*

*Ahmed al-Mughir* : ARMSTRONG 1981, Pl. 112 : 36.
*Tell Asmar* : *OIP* 63, Pl. 153 : B.236.300 and B.237.100.
*Tell Bakr Awa (Shahrizor Plain)* : MUHAMMAD BAKIR AL-HUSAINI 1962, Table 6 : 16.
*Tell Haddad* : BURHAN SHAKIR SULAIMAN 2003-04, 107, fig. 6 : 848.
*Tell Halawa* : GHASSAN 1995, Pls. **57** : 14 (strong concave side and large band of dark paint around the rim) and **147** : 554-555 and probably also 551-553 (all are sherds with preserved base).
*Tell Owessat* : JAKOB-ROST *et al*. 1983, figs. **32** (= GHASSAN 1995, Pl. 114 : 341) and **46B** (= GHASSAN 1995, Pl. 113 : 332).

## Group 65 D 3 (Pl. 54 : 10-13)

This small group includes cups with straight or slightly curved sides set off from a convex (slightly rounded) base by a very low carination. Rims are tapered and everted. Plate 54 : 10, in particular, has very thin walls of fine, well-levigated clay ; all examples appear to be very well made, if not fine.

A few examples of Group 65 D 3 cups dating to the 18th century have been found in northern and southern Babylonia. However, in the Upper and Lower Diyala Basin, these cups are much more common and display a less limited range of shapes. In the Diyala the base can be either slightly convex, set off from the side by a more or less rounded carination, or flat and well-finished. The earliest examples date to the latter part of the 19th century,[176] and production continues in the Diyala through the end of the 17th century (Isin-Larsa to Old Babylonian Periods).[177] The shape is also known farther north at Nuzi.[178] As seems also to have been the case with Groups 65 C 1 and 65 C 2 (concave-sided cups), Group 65 D 3 appeared in the Diyala Basin and flourished there before spreading southward in a limited way to the alluvial plain.

*COMPARANDA*

*Diyala Basin*

*Ishchali* : *OIP* 63, Pl. 153 : B.236.200b.

172 "The Hasanlu istikhans [cups] probably derived from the west … which speaks for western relations in the Bronze Age" (MUSCARELLA 1994, 141).

173 See *Comparanda* below.

174 See fn. 171. Concave-sided cups similar to those from Babylonia have been found at the northern Mesopotamian sites of Nuzi and Tell Billa (see Comparanda of Groups 65 C 1 and 65 C 2). However, neither of these sites provides satisfactorily close dating for the cups, so we do not know whether they predate the cups from the Diyala or not.

175 Harrâdum Level 3D (*Haradum* 1, fig. 87 : 3-5).

176 GABUTTI 2002-03, Pl. 60 : 11 and 15.

177 *Ishchali* : *OIP* 63, Pl. 153 : B.236.200b ; *Tell Asmar and Ishchali* : *OIP* 63, Pl. 153 : B.236.200a ; *Tell as-Sib* : GHASSAN 1995, Pl. 114 : 338 ; *Tell Genj* : WILSON-BRIGGS *et al*. 1984, Pl. V : 8 = (?) GHASSAN 1995, Pl. 112 : 331 (rim missing ; painted sub-horizontal band on the upper body) ; *Tell Halawa* : GHASSAN 1995, Pl. 56 ; *Tell Owessat* : GHASSAN 1995, Pl. 112 : 327 (rim missing), 329 (rim missing = JAKOB-ROST *et al*. 1983, fig. 31), and JAKOB-ROST *et al*. 1983, fig. 46 ; *Tell Suleimah* : GHASSAN 1995, Pl. 112 : 330 ; and *Tell Yelkhi* : GABUTTI 2002-03, Pls. **60** : 3 to **61** : 14.

178 STARR 1937, possibly Pl. 62 : U (flat base with slightly convex center).

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## FAMILY 70

Family 70 consists of two groups of small, well-made cylindrical cups with thin walls and tapered rims. The bases are well finished, either small rings (Group 70 A 2) or pedestals (Group 70 B 2). There does not appear to be a developmental connection between the two groups. Group 70 B 2 is found in southern Babylonia in the 17th century, and Group 70 A 2 is attested only in 16th-century northern Babylonia.

### Group 70 A 2 (Pl. 55 : 1-3)

This group includes small, low, finely made cups with generally thin-walled, straight sides, slightly everted tapered rims and small, fine ring bases. The maximum diameter of the body is about the same as the vessel height. The group is attested in northern Babylonia in the 16th century, where it is moderately frequent, and in the nearby Lower Diyala Basin.

*COMPARANDA*

*Northern Alluvial Plain*

*Tell ed-Dēr* : besides Pl. 55 : 1-3 illustrated here, see also : *MHEM* 1, Pl. 30 : 17.

*Diyala Basin*

*Tell ed-Dhiba'i* : MOHAMMAD ALI MUSTAFA 1949, Pl. IV : 5.

### Group 70 B 2 (Pl. 55 : 4-8)

This group is made up of small, well-made cylindrical cups with tapered simple rims and small, well-finished pedestal bases. These cups have only been found in southern Babylonia. Examples from Nippur and Larsa anchor this small but characteristic group in the middle decades of the 17th century.

*COMPARANDA*

*Southern Alluvial Plain*

*Isin* : *Isin* 4, probably Pl. 55 : 19.

*Larsa* : besides Pl. 55 : 5, 7-8 illustrated here, see also : CALVET 2003, figs. **46** : 27.50 and **51** : 27.532.

## FAMILY 75

Family 75 consists of small, almost miniature, cylindrical vessels. They apparently had a cultic or votive purpose.

### Groups 75 A 1 (Pl. 55 : 9-10) and 75 A 2 (Pl. 55 : 11)

These two groups include several small, narrow cylindrical vessels with simple or flaring rims. The examples are divided into two groups based on their bases, either unfinished and flat (Group 75 A 1 ; Pl. 55 : 9-10) or ring (Group 75 A 2 ; Pl. 55 : 11). The vessels were fashioned crudely, and their interiors are too constricted to be of much practical use. Two examples were impressed with small symbols of apparent religious significance (Pl. 55 : 10[179]-11), so a cultic or votive function is proposed for them. All known examples come from the Southern Alluvial Plain and appear to date to between the 19th and early 17th centuries, that is, the Isin-Larsa Period.

*COMPARANDA*

*Southern Alluvial Plain*

*Nippur* : *OIP* 78, Pl. 91 : 7 (75 A 2).

*Ur* : WOOLLEY & MALLOWAN 1976, 191, 196, Pl. 107 : 72b (75 A 2).

*Warka* : VAN ESS 1988b, fig. 4 : 16 (75 A 2).

179 The symbol engraved on this vessel is SEIDL's (1957-71, 488) *Doppellöwenkeule*, attested probably from as early as the Akkadian Period. In the beginning of the 2nd millennium, it is known to be the attribute of different gods and goddesses, while it seems to be Ninurta's symbol on the Kassite *kudurru*s.

## FAMILY 80

Family 80 includes two groups of large, tall cylindrical vessels.

### Groups 80 A 1 (Pl. 56 : 1) and 80 A 2 (Pl. 56 : 2-9)

The two groups in Family 80 consist of large, tall, cylindrical (tube-like) jars with either string-cut (Pl. 56 : 1) or ring (Pl. 56 : 2-9) bases. The sides are essentially straight and vertical, tapering inward a little toward the base and usually inward toward the rim. The rims are tapered, rounded or outwardly thickened. These vessels have been found only in the Northern Alluvial Plain during the 16th century and in the adjacent Lower Diyala Basin. They are therefore very diagnostic for the Late Old Babylonian Period in northern Babylonia.

*COMPARANDA*

*Northern Alluvial Plain*

*Kish* : DE GENOUILLAC 1925, Pl. XVIII : 1, center, low.

*Tell ed-Dēr* : besides Pl. 56 : 2-9 illustrated here, see also : *MHEM* 1, Pl. 31 : 3 and 6 (Group 80 A 2).

*Diyala Basin*

*Tell ed-Dhiba'i* : MOHAMMAD ALI MUSTAFA 1949, Pl. V : 37.

## FAMILY 85

Family 85 consists of small to medium-sized more-or-less cylindrical vessels. There are four groups in total, one in the North and, separately, three small groups in the South that are variants of one another.

### Group 85 A 2 (Pl. 57 : 1-7)

These small to medium-sized vessels have cylindrical sides that, generally speaking, curve inward to a small ring base. The pronounced curve between sides and base and the slightly bottom-heavy shape that can be seen in the example illustrated in Plate 57 : 4 are close to the limit between this group and smaller examples of Group 95 A 2 (Pls. 61-62), with which it is contemporary. Rims are tapered and sometimes slightly everted. Where it is preserved, a horizontal groove encircles the upper body, creating the suggestion of a separate neck, though the profile lacks a shoulder. The size of these vessels and the shape of their rims indicate that they were almost certainly used for drinking.

Figure 5 shows an example from Sippar with a flat base, which is not attested in Tell ed-Dēr.

Among late 17th- and 16th-century examples, all from Tell ed-Dēr (Pl. 57 : 1-3), only the lower bodies have been preserved. They have noticeably thicker walls than the earlier vessels. Figure 6, a contemporary vessel from Ishchali with a flaring rim, may represent the complete profile of these, the latest examples of Group 85 A 2.

This group has been attested in the Northern Alluvial Plain between the 18th and 16th centuries. An example from the Diyala Basin comes from a context dating to around 1600 (see *Comparanda* under Yelkhi). Figure 6, from Ishchali Kititum III, is probably to be dated to the 17th century (see the Final Remarks).

*COMPARANDA*

*Northern Alluvial Plain*

*Kish* : DE GENOUILLAC 1925, Pl. XVIII : 3, left = Pl. 55 : 15.

*Sippar (Abu Habbah)* : *Sumer* 54, Pls. **48** : 7 and **52** : 8, 10.

*Tell ed-Dēr* : besides Pl. 57 : 1-7 illustrated here, see also : *TD* 1, Pl. 18 : 4-6. *MHEM* 1, Pl. 32 : 5-7.

*Diyala Basin*

*Tell Suleimah* : GHASSAN 1995, Pl. 124 : 402; slightly convex body.

*Tell Yelkhi* : GABUTTI 2002-03, Pl. 71 : 12.

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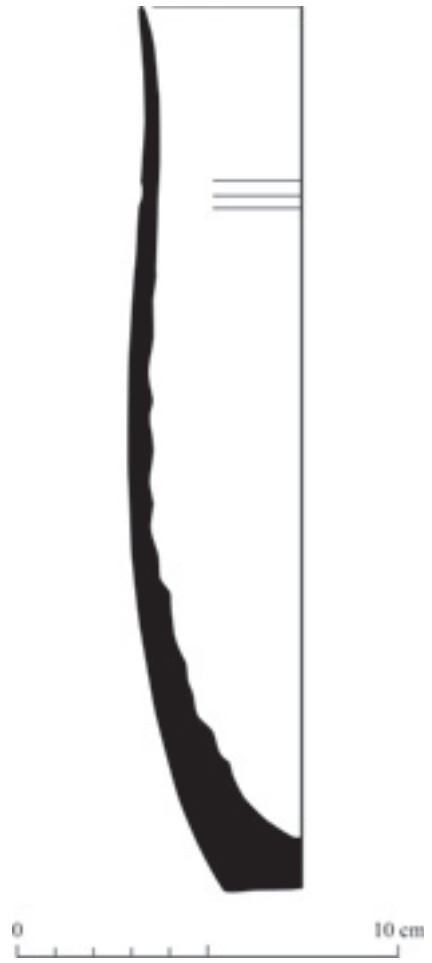


Fig. 5. Vessel of Group 85 A with a flat base.
Sippar (Abu Habbah) : Exc. U/106, ø rim : 86. *Sumer* 54, Pl. 52 : 9.

Fig. 6. Old-Babylonian vessel from the lower Diyala, probably of Group 85 A 2.
Ishchali : Kititum III, ø rim : 72. *OIP* 63, C.558.320.

### Groups 85 B 1 (Pl. 57 : 8-9) and 85 B 2 (Pl. 57 : 10)

These two groups consist of vessels with cylindrical sides that curve down to string-cut (Pl. 57 : 8-9) or ring (Pl. 57 : 10) bases. The bodies have their center of gravity and their maximum diameters at or just below their midlines. The short, everted and tapered or rounded rims have been set off from the body either by a horizontal groove (Pl. 57 : 9), an abrupt thinning of the vessel wall (Pl. 57 : 8) or a sharp turn outward (Pl. 57 : 10). The rims are sometimes painted with a band of black or dark brown paint (Pl. 57 : 8). These are almost certainly small drinking vessels.

All examples come from sites in the Southern Alluvial Plain and can be dated to the 17th century based primarily on the well-dated contexts of the vessels from Nippur.

*COMPARANDA*

*Southern Alluvial Plain*

*Larsa* : CALVET *et al*. 2003, fig. 31 : a (= PARROT 1968, fig. 15 : second row, No. 3) and b (= PARROT 1968, fig. 15 : second row, No. 1).
*Mashkan-shapir* : STONE and ZIMANSKY 2004, fig. 50 : AbD 87-218.
*Nippur* : besides Pl. 57 : 8 illustrated here, see also : FRANKE 1978, fig. 59 : 5.

### Group 85 C 2 (Pl. 57 : 11)

Group 85 C 2 is a small group of cups related to the foregoing Groups 85 B 1 and 85 B 2. It is similar to Group 85 B 2, except that its maximum body diameter is close to the rim, giving it a flaring profile with a more tapered lower body than is exhibited by the cups of Groups 85 B 1 and 85 B 2. There is a ring base. The rim is turned sharply outward like Plate 57 : 10, is set off by a horizontal groove like Plate 57 : 9 and is painted like Plate 57 : 8.

This group is found only in the Southern Alluvial Plain. We have assigned it to the 17th century based on its similarity to Plate 57 : 8 (Group 85 B 1), which is from a 17th-century context at Nippur.

*COMPARANDA*

*Southern Alluvial Plain*

*Isin* : besides Pl. 57 : 11 illustrated here, see also : *Isin* 3, Pl. 26 : 15.
*Telloh* : DE GENOUILLAC 1936, possibly Pl. 122 : 4b.

## FAMILY 90

The four groups that make up this family represent a large number of tall early 2nd-millennium vessels from southern Babylonia that are often referred to as goblets. Their body shapes range from straight-sided and vertical or slightly flaring to

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somewhat sinuous. Group 90 A 2 with its tapered, flaring rim, is almost certainly a drinking vessel, and seems to be the typical southern Babylonian goblet of the 17th century. The vessels of the remaining three groups have thicker and more elaborate rims that are less obviously appropriate for drinking.

## Group 90 A 2 (Pl. 57 : 12 to Pl. 58 : 4)

The members of this group have a tall vertical to sinuous-sided body that curves down to a ring base. The normally rounded and tapered rim curves outward from the upper body ; very rare and not illustrated here is a small everted and beveled rim.[180] Necks, as such, are not present, except as suggested by the sinuosity of some examples. Occasional decoration consists of band of paint (Pl. 57 : 13) or a horizontal incision (Pl. 57 : 14-15) just below the rim.

Several of the bases of this group have been patched on the underside of the base with coarsely tempered clay (Pl. 58 : 2 and 4). The potter would have done this to repair cracks that formed during drying (see the photo of Pl. 58 : 2, where a vertical crack is visible above the patch of coarsely tempered clay on the underside of the base).[181]

Group 90 A 2 is attested in southern Babylonia during the 17th century. This is the predominant southern Babylonian goblet of the time of Hammurabi and Samsuiluna. Plates 57 : 15 and 58 : 4, from Larsa, both bear seal impressions containing names, which have not been read. They are among some twenty-two seal-impressed whole or fragmentary goblets found at Larsa in 1967.[182] Another goblet from Larsa, belonging, we assume, to Group 90 A 2, contained a tablet dated to the reign of Samsuiluna,[183] which supports the 17th-century date for the group. According to *OIP* 78 the earliest examples of this shape come from 18th-century NLC (pre-Hammurabi) contexts in Areas TA and TB at Nippur, but none of these was illustrated.[184]

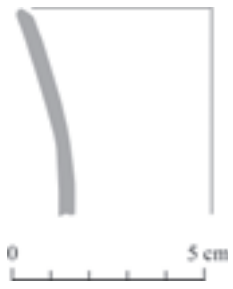


Fig. 7. Rim and upper body sherd of a Group 90 A 2 goblet found in the Gulf.
Failaka : ø rim : 102. HØJLUND 1987, 75, fig. 279.

This southern goblet is also attested in the Gulf. Figure 7 shows a sherd preserving the rim and upper body of a Group 90 A 2 goblet from Failaka. Though only the upper part of the profile is preserved, it shows the smooth sinuosity below the rim common to the southern, as opposed to northern (Group 95 A 1 ), Babylonian goblets.

*COMPARANDA*

*Southern Alluvial Plain*

*Bismaya* : WILSON 2012, Pl. 89 : a.

*Mashkan-shapir* : STONE and ZIMANSKY, 2004, fig. 50 : AbD 90-295 and AbD 90-756.

*Nippur* : besides Pl. 57 : 13 illustrated here, see also :
*OIC* 22, fig. 42 : 020077, 410127 and 440127.
*OIP* 78, Pl. 95 : 17.

*Isin* : besides Pl. 57 : 12 illustrated here, see also :
*Isin* 1, Pl. 28 : IB 650 and IB 693.
*Isin* 2, Pl. 34 : IB 848a and b.
*Isin* 3, Pls. **26** : 14 and **29** : 1.

*Larsa* : besides Pls. **57** : 14-15 and **58** : 2 and 4 illustrated here, see also :
CALVET 2003, figs. **46** : 27.12 and 27.160, **48** : 27.110 (?) and 27.118, **52** : 27.278, **57** : 27.563, **64** : 59.42 and 59.43, **67** : 59.52 and 59. 55 and Pl. 34 : c (= 27.279).
CALVET *et al*. 2003, figs. 12 and 13 ; also fig. 31 : d-f (Exc. Parrot 1967).
GASCHE in press, Pl. 4 : 90-94. Sherd 90 belongs and sherds 91 to 94 probably belong to Group 90 A 2.
PARROT 1968, figs. **15** (the vessels with rounded rim), **19** : 550, 554-568 and 570 (inscribed fragments that could belong to 90 A 2, 90 B 2 or 90 C 2).

*Ur* : HALL 1930, 182, fig. 144 : second vessel from left.
QASSIM R. HANEEN 2003-04, 53, Pl. 8 (photos).
WOOLLEY 1965, type 34. "…many undated examples. The type goes back to L[arsa] and even to the Sargonid period" (p. 99); we disagree with the "Sargonid period".
WOOLLEY and MALLOWAN 1976, type 69a.

*Warka* : besides Pl. 58 : 1 illustrated here, see also :
VAN ESS 1988b, fig. 4 : 9 and 13.

*Gulf*

*Failaka* : HØJLUND 1987, 75, fig. 279 = our fig. 7.

## Group 90 B 2 (Pl. 58 : 5-11)

The vessels of Group 90 B 2 have an everted rim around which a small vertical band has been shaped. Their profiles are nearly straight-sided or marginally sinuous ; some examples have slightly flaring sides (Pl. 58 : 8-9 ; compare the vessels in Group 90 C 2 [Pl. 58 : 12-13]). All have reshaped bases like those of Group 90 A 2. Except for the band rim they are essentially the same as the goblets of Group 90 A 2.

One illustrated example has a plugged base (Pl. 58 : 6). The potter deliberately cut off the vessel from the hump of clay on the wheel with a hole in the base, which he then filled with coarsely tempered clay. He did this to prevent the formation of cracks in the base during drying.

These band-rim goblets have been found principally at sites in southernmost Babylonia, including Larsa, Warka, Ur and Telloh. On the basis of the stratigraphic evidence of Sounding J VIII at Larsa (Pl. 58 : 11) and the relative sequence of early 2nd-millennium burials at Warka,[185] we have placed them at the beginning of the 17th century or the end of the 18th, in either case somewhat earlier than the flourit of the simple-rim goblets of Group 90 A 2 in the 17th century. They may be contemporary with early examples of Group 90 A 2 attested at Nippur.[186] A possible variant of Group 90 B 2 comes from Nippur (see *Comparanda*), but, because it dates to the 19th century (Area TB Level III), it would appear to be early for the group. However, at this point the time-range of the group as a whole is still uncertain.

The chronological relationship between Groups 90 A 2 and 90 B 2 at the far southern sites of Babylonia has not been fully worked out. Nevertheless, Group 90 B 2 is not attested in the

180 See PARROT 1968, fig. 15 : second row, right = CALVET *et al*. 2003, fig. 31 : c.

181 See also the photo with Pl. 101 : 3, where the severe cracks that formed during drying were patched by the potter on the underside of the base.

182 PARROT 1968, pp. 225-226, figs. 18-19. Only one whole vessel was found, which is illustrated here in Plate 57 : 15.

183 *Ib*. The goblet containing the tablet is mentioned with reference to the seal-impressed goblets, which certainly belong to Group 90 A 2, so we assume that the goblet in question belongs to this group as well, but unfortunately it is neither illustrated nor further described.

184 See Type 39B in *OIP* 78, Table II and Pl. 95 :17 (including the comments under Remarks on the facing page).

185 As published in *AUWE* 10.

186 See fn. 184.

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terminal Old Babylonian levels at Larsa and Warka, which are dated to the reign of Samsuiluna. Only examples of Group 90 A 2 have been found in those contexts. Therefore, we believe that Group 90 B 2 had ceased being produced before the middle of the 17th century.

*COMPARANDA*

*Southern Alluvial Plain*

| | |
|---|---|
| *Larsa* : | besides Pls. 58 : 5, 8-9 and 11 illustrated here, see also : PARROT 1968, figs. **15** : L. 584 (= CALVET *et al.* 2003, fig. 31 : g) and **19** : 550, 554-568 and 570 (inscribed fragments that could belong to 90 A 2, 90 B 2 or 90 C 2). |
| *Nippur* : | *OIP* 78, possibly Pl. 95 : 12. |
| *Telloh* : | besides Pls. 58 : 6 and 10 illustrated here, see also : DE GENOUILLAC 1936, Pl. 111 : 1a (?) and c. |
| *Ur* : | HALL 1930, 182, fig. 144 : second vessel from right. WOOLLEY and MALLOWAN 1976, type 71. |
| *Warka* : | besides Pl. 58 : 7 illustrated here, see also : *AUWE* 10, Pl. 13 : b, d-f, h. |

## Group 90 C 2 (Pl. 58 : 12-13)

The vessels in this small group have tall, straight, slightly flaring sides with ring bases or reshaped feet, similar to those of some of the members of Group 90 B 2 (Pl. 58 : 8-9). They have been distinguished from the others because of their outwardly thickened and beveled – instead of band – rims.

This group has thus far been identified only at sites in far southern Babylonia : Ur, Telloh and perhaps Larsa. The chronological position of the examples is insecure. They have been dated as being contemporary with Group 90 B 2, because they appear to represent a variant rim shape of the previous group.

*COMPARANDA*

*Southern Alluvial Plain*

| | |
|---|---|
| *Larsa* : | PARROT 1968, fig. 19 : 550, 554-568 and 570 (inscribed fragments that belong to 90 A 2, 90 B 2 or 90 C 2). |
| *Ur* : | WOOLLEY 1965, type 33; "also L[arsa]" (p. 99). |

## Group 90 D 2 (Pl. 59 : 1)

This minor group is characterized by its slightly flaring sides and ring base. The rim is outwardly thickened and horizontal. It has been set off from the body by a narrow ledge.

Thus far Group 90 D 2 has been attested only in southern Babylonia. It can be dated to the middle of the 17th century, since it was found in the destruction level of the Sînkāšid Palace at Warka and in one of the mid-17th-century houses at Larsa (see *Comparanda*).

*COMPARANDA*

*Southern Alluvial Plain*

| | |
|---|---|
| *Isin* : | *Isin* 4, Pl. 55 : 2. |
| *Larsa* : | CALVET 2003, fig. 57 : 27.571 (base missing ; slightly concave side). |
| *Ur* : | WOOLLEY and MALLOWAN 1976, type 72d. |

# FAMILY 95

Family 95 consists of tall, more-or-less ovoid vessels with necks that are set off by a constriction and are frequently marked with a groove. This family is found primarily in northern Babylonia and its periphery from the 18th through the 16th centuries. There are two groups, with string-cut and ring bases respectively.

## Group 95 A 1 (Pl. 59 : 2 to Pl. 60 : 11)

Group 95 A 1 consists of vessels with a tall, ovoid body, the proportions of which change over time. A slightly everted neck is set off from the body by a constriction and is often marked by a horizontal incision or groove. Bases are unfinished ; they range in shape from small, flat string-cut disks to short, sometimes twisted, stumps (Pl. 60 : 4). The variation in the shapes of these bases is likely due to the cursory manner in which the potter removed the vessel from the wheel.

Group 95 A 1 is at home in northern Babylonia, where it appears in large numbers. A rare example from the Southern Alluvial Plain comes from a likely 17th-century context at Warka,[187] shown here as Figure 8. It looks very similar to contemporary and somewhat later examples from Tell ed-Dēr (e.g., Pl. 59 : 3 and Pl. 60 : 4). Group 95 A 1 is also attested in the Middle Euphrates, but in Harrâdum, for example, these vessels mostly have a ring or otherwise finished base (Group 95 A 2).

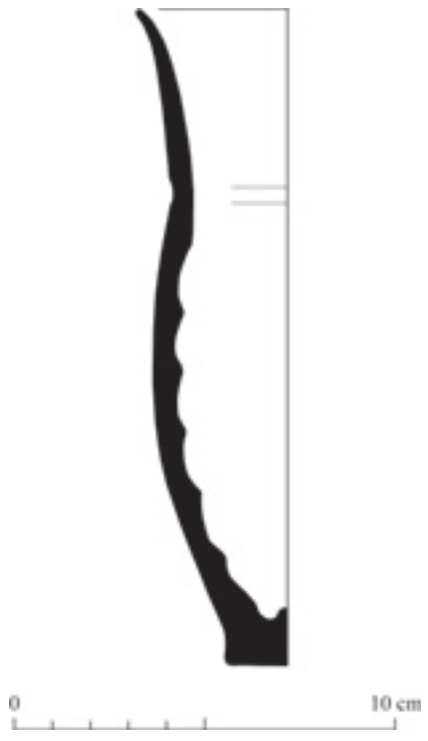


Fig. 8. A rare example of Group 95 A 1 from the Southern Alluvial Plain.
Warka : 19819, Sînkāšid, Stratigraphic Unit 5a, ø rim : 81.
VAN ESS 1988a, fig. 35 : 203.

The earliest members of Group 95 A 1 can be dated to the first half of the 18th century. Eighteenth- and 17th-century examples tend to have a bottom-heavy or "baggy" profile (see especially Pl. 59 : 4, 7-9 and 11). During the 17th century the center of gravity of these goblets begins to rise (Pl. 59 : 5-6 and 60 : 7), so that in the 16th century the widest diameter of the body is frequently around the midpoint (Pl. 60 : 3) or even higher (Pl. 60 : 2 and 4). As a result of their higher maximum diameter some 16th-century examples begin to have a more tapered lower body than before (Pl. 60 : 2 and 4). This trend is also apparent among the goblets of Group 95 A 2 (see below).

In Susiana this shape first appeared in the early 17th century with the flat or stump bases typically found in northern Babylonia. The earliest examples from Susiana (Pl. 59 : 12) look very much like the contemporary forms Babylonian forms (Pl. 59 : 4 and 7), though on the Susa goblets the horizontal groove marking the neck was incised below the narrowest point of constriction, giving the necks on the Susa examples an apparently more convex profile than was evident in Babylonia proper (Pl. 59 : 12 and

187 VAN ESS 1988a, fig. 35 : 203, assigned to *Stratigraphische Einheit* 5a of the Sînkāšid Palace = *wahrscheinlich Palast oder jüngere Schichten*. A second example from Warka (*ib.*, fig. 35 : 201) was recovered from the surface of the site.

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Pl. 60 : 10-11). By the 16th century, the local successors to the earlier bottom-heavy goblet in Susiana had became relatively slender, resulting in an almost biconical body (Pl. 60 : 10). This biconical shape, however, is not found in 16th-century Babylonia. In other words, these formerly Babylonian goblets had entered the local assemblage in Susiana and, apparently as a result of an attenuated connection with Babylonia during the 16th century, developed along an independent local trajectory.

A further example of Group 95 $A_1$ in Iran comes from Fars.

Fig. 9. Early 16th-century Diyala goblet from the Hamrin.
Tell Yelkhi : HY 123, B, Level IIIb, *giallo-verdastro*, ø rim : 99.
GABUTTI 2002-03, Pl. 78 : 4.

*Excursus*. Shortly before 1600, flat- or stump-based goblets with high maximum body diameters first appear in the Diyala and continue being produced into the 16th century.[188] These goblets have an almost conical profile, flaring from the narrow base to a very high, wide and well-defined shoulder ; they always have a stump or flat base (fig. 9). This distinctive shape, though reminiscent of much later Kassite goblets, except for its crude, unfinished base, has not been found in contemporary late 17th- or 16th-century contexts in the Northern Alluvial Plain. Since its highly distinctive shape was not copied within Babylonia itself, we do not consider this goblet to belong to the Babylonian pottery tradition.

However, did this high-shouldered " Diyala goblet " develop under the influence of Babylonian goblets of the late 17th century ? At present the evidence is slight. The best example we have for a "missing link" between the northern Babylonian and Diyala goblets is shown here on Pl. 61 : 6, a northern Babylonian goblet with a ring base (Group 95 $A_2$) found at Yelkhi in a late 17th-century context (Level IVa). The local high-shouldered goblets represented by fig. 9 began to appear slightly earlier, in Yelkhi Level IVb. The question must remain open. However, the Diyala goblet did not develop out of an indigenous shape. There is no predecessor goblet, yet after the Diyala goblet appeared, in the latter part of the 17th century, it almost immediately became an important element in the indigenous Diyala pottery assemblage, based on the number of examples reported from Diyala sites.[189] This is reminiscent of what happened to the Babylonian goblet when it was adopted locally in Susiana on at least two occasions (see above in this section and below under Group 215 $A_2$).

*COMPARANDA*

*Northern Alluvial Plain*

*Kish* : DE GENOUILLAC 1925, Pl. 55 : 7.
*Sippar (Abu Habbah)* : *Sumer* 54, Pl. 52 : 7.
*Tell ed-Dēr* : besides the goblets illustrated here on Pls. 59 and 60, see also :
*TD* 1, Pl. 17 : 1-5.
*TD* 2, Pl. 15 : 5.
*MHEM* 1, Pls. **32** : 2-4 and **33** : 2.

*Southern Alluvial Plain*

*Warka* : VAN ESS 1988a, fig. 35 : 201 and 203 = fig. 8 illustrated above.

*Middle Euphrates*

*Harrâdum* : *Haradum* 1, figs. **91** : 5 and **139** : 2.
*Tell al-'Usiyeh* : AGHA 1987-88, 139, fig. 36 : 34, 36, 38 and 39.
FUJII *et al.*, 1984-85, fig. 6 : 1 (or Group 95 $A_2$) = OGUCHI, K. & H. 2006, fig. 14 : c, close to Tell ed-Dēr examples.

*Susiana*

*Susa* : besides Pls. 59 : 12 and 60 : 9-11 illustrated here, see also :
*MDP* 47, Pl. 20 : 3, 5, 6 (= PONS 1991, Pl. 11 : 2), 7-10 and 12-23.
PONS 1991, Pl. 11 : 1 (Exc. de Mecquenem), 2 (= *MDP* 47, Pl. 20 : 6), 3 (Exc. de Morgan), and 4 (Exc. Perrot).
JÉQUIER 1900, fig. 308.
LAMPRE 1900, fig. 162.

*Fars (Iran)*

*Tall-i Malyān* : SUMNER 1974, fig. 8 : a (close to our Pl. 60 : 9).

## Group 95 $A_2$ (Pl. 61 : 1 to Pl. 62 : 12)

Group 95 $A_2$ includes goblets that generally have the same overall shape as those of Group 95 $A_1$ but have a base that was reworked or finished by the potter into a drawn-out and reshaped ring or, more rarely, a low pedestal (Pl. 62 : 1 and 3). Rims are rounded or tapered. Necks are everted and have usually been set off from the body by a horizontal incision or groove at the line of the narrowest diameter of the upper body.

The baggy profile characteristic of the 17th century, with its low maximum body diameter, continues through the 16th century. However, over time, the number of examples with higher

188 These goblets have been described by GABUTTI (2002-03, 92), who observes that they first appear at Tell Yelkhi in relatively small numbers in Level IVb and reach their maximum frequency in Level III. That is, they first appear in the latter half of the 17th century NLC and become a very diagnostic shape in the Tell Yelkhi assemblage in the 16th century. These vessels are found throughout the Diyala Basin, including many examples from Tell Yelkhi (GABUTTI 2002-03, Pl. **76** : 4-6 ; **77** : 3-78 : 6), as well as from Tell Asmar and Ishchali in the Lower Diyala Basin (*OIP* 63, Pls. **121** : f and **184** : C.547.720 [13 attestations of this form are listed in the Notes opposite Pl. 184]). They are also at Tell ed-Dhiba'i in Baghdad (AL-GAILANI 1965, Pl. 1 : 6). However, until now they have not been found south or west of the Tigris.

189 See fn. 188.

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maximum body diameters increases (Pl. 61 : 6, and Pl. 62 : 7, 9 and 11-12). Many of these also have a tapered lower body, especially when the base is small (Pl. 61 : 6 and Pl. 62 : 9 and 11-12). These characteristics are especially common in the Middle Euphrates at Harrâdum (Pl. 62 : 11-12). High maximum body diameters are present at Babylon, as well (Pl. 62 : 7).

A high maximum body diameter, a tapered lower body and a drawn out and reshaped foot are characteristic of Early Kassite goblets (Group 215 $A_2$, Pl. 99) ; what distinguishes these 16th-century vessels from the Early Kassite ones, in particular, is that the latter have a broader shoulder and tend to have a more vertical, as opposed to flaring, neck.

Group 95 $A_2$ is attested in the Northern Alluvial Plain beginning around the middle of the 17th century. This is about a century after Group 95 $A_1$ first appeared, which means that from the latter half of the eighteenth century stump- and flat-based goblets were being produced in northern Babylonia at the same time that goblets with drawn-out ring-like feet were being made in southern Babylonia (Group 90 $A_2$). When the footed goblets began to appear in the North around 1650, it is possible that the idea came from the South. The adoption in northern Babylonia of the southern foot may have included the introduction of the southern technique for producing plugged bases, as well (Pl. 61 : 1 shows an example of a plugged base). During the remainder of the 17th century, the reshaped foot was still less popular in the North than in the South, for the majority of northern goblets of the 17th century have an unfinished flat/stump base. However, in the 16th century, after large-scale pottery manufacture had ceased in the South, the situation between the two groups in northern Babylonia was reversed. The footed variant (Group 95 $A_2$) overtook the flat- or stump-based variant (Group 95 $A_1$) in popularity. The evidence from Tell ed-Dēr indicates that before the middle of the 16th century, Group 95 $A_1$ had disappeared completely. In the 15th century only the reshaped foot characteristic of Group 95 $A_2$ was used for the Early Kassite goblets (Group 215 $A_2$, Pl. 99).

Plate 62 illustrates all three methods that Babylonian potters developed for dealing with cracks in thick vessel bases (see also "The Babylonian Potter : Environment, Clay and Techniques" below). There is the patched base (Pl. 62 : 9), where the potter has simply repaired drying cracks with coarsely tempered clay. With the plugged base (Pl 62 : 8 and 12), the potter, when he separated the goblet from the cone of clay on the wheel, left a hole in its base, which he then filled with a plug of coarsely tempered clay. Finally, there is the filled-in base (Pl. 62 : 10), where the potter added coarsely tempered clay to a hole in the top of the cone (hump) on the wheel. Then, when he threw the goblet, that coarse clay filled in the goblet's base. Plate 62 : 10, from the early 16th century, is the earliest example we have of a vessel with a filled-in base. It suggests that this method was first introduced not later than around 1600.

Group 95 $A_2$ is attested in the Northern Alluvial Plain from around 1650 through the third quarter of the 16th century. However, based on present evidence, this group has not been found in southern Babylonia. In the Middle Euphrates it is attested from the latter part of the 17th century through the third quarter of the 16th century. In the Diyala it appears at the end of the 17th century. It is also present in Susiana at Chogha Pahn, but not at Susa itself.

*COMPARANDA*

*Northern Alluvial Plain*

*Kish* : DE GENOUILLAC 1924, Pl. X : 3 = (?) Pl. 50 : 135.
LANGDON 1924, Pl. 32 : 1, left (lying vessel) and 3, right.

*Sippar (Abu Habbah)* : AL-JADIR 1987, 193, illustr. 18 : 5
AL-JADIR 1989-90, 87, illustr. 6 : 7.
*BaM* 36, Pls. **24** : 212, 240, 241, 2864 and 2883, **25** : 2882 and 2888, **27** : 240, 241 and **28** : 2885.

*Tell ed-Dēr* : besides the goblets illustrated here on Pls. 61 and 62, see also :
*TD* 1, Pl. 10 : 3.
*TD* 2, Pls. **15** : 2 and **20** : 4.
SALLABERGER 1996, Pl. 2 : 3.
*MHEM* 1, Pl. 33 : 3-7, 9-16, 18 and 22-26.

*Tell ed-Deylam (Dilbat)*: besides Pl. 62 : 2 and 5 illustrated here, see also :
ARMSTRONG 2001, fig. 9 : c-d.

*Middle Euphrates*

*'Āna* : SABAH JASIM ABDUL-AMIR 1988, fig. 101 : 2 (erroneously dated late 2nd mill.).

*Harrâdum* : besides Pls. **61** : 4-5 and **62** : 10-11 illustrated here, see also :
*Haradum* 1, figs. **91** : 7-8, **92** : 1-4, 6-10 and 12, **93** : 6-7 and **94** : 4.

*Tell al-'Usiyeh* : FUJII *et al.*, 1984-85, fig. 6 : 1 (or Group 95 $A_2$) = OGUCHI, K. & H. 2006, fig. 14 : c ; close to Tell ed-Dēr examples.
FUJII *et al.*, 1984-85, figs. **6** : 2 (= OGUCHI, K. & H. 2006, fig. 14 : d ; close to Pl. 62 : 10 from Harrâdum) and **6** : 3.
SABAH JASIM ABDUL-AMIR 1988, fig. 90 : 11.

*Diyala Basin*

*Tell ed-Dhiba'i* : AL-GAILANI 1965, Pl. 1 : 2.
KHALID K. HAMMOUDI 1989-90, 100, left illustration on top.
MUHAMMAD M. SHAKIR *et al.* 1984, p. 63, left.

*Tell Owessat* : JAKOB-ROST *et al.* 1983, fig. 34.

*Susiana*

*Chogha Pahn* : *IVth Annual Symp., Tehran*, 1976, fig. 2 : f-g (plugged bases) and h.

## FAMILY 100

This family is made up of tall vessels with ovoid bodies and medium to tall flaring necks.

### Group 100 $A_2$ (Pls. 63 : 1 to Pl. 64 : 7)

This group consists of jars with elongated and bottom-heavy ovoid bodies and ring bases. The everted necks spring from a constriction at the top of the body. Plates 63 : 3 and 64 : 6 show a small ledge at the base of the neck. Other necks are set off by a groove or grooves (Pl. 63 : 2 and 5 ; and Pl. 64 : 1-2, 4-5 and 7). Rims are usually rounded, occasionally also tapered (Pl. 63 : 2 and 5, and Pl. 64 : 7). Exceptions include the flattened rim of Plate 63 : 3, and the slightly thickened and beveled rim of Plate 64 : 6. The jars in this group range in height from about 20 to 41 cm. The later examples, from the 17th and 16th centuries (Pl. 64), are substantially larger than the earlier ones (Pl. 63).

Group 100 $A_2$ is attested from the early 18th century through the middle of the 16th century in the Northern Alluvial Plain. A southern example with thick walls, which may date to the 17th century, has been found at Warka (Pl. 64 : 7). This is, therefore, a predominately northern shape. It is also reported from Fars in southwestern Iran.

*COMPARANDA*

*Northern Alluvial Plain*

*Kish* : LANGDON 1924, Pl. **32** : 1, right and 3, left,[190] and **35** : 3, center (standing vessel).

*Sippar (Abu Habbah)* : AL-JADIR 1987, 199-200, illustrations **1** : d and **3** : a (photos).
*Sumer* 54, Pls. **49** : 1-2 and **53** : 1. Pl. 49 : 7 is a complete jar with a possible flat base (100 $A_2$ ?).

*Tell ed-Dēr* : besides the vessels illustrated here on Pls. 63 and 64, see also :
*TD* 1, Pl. 18 : 1. >

[190] The vessels illustrated on Pl. 32 : 1 and 3 are not Neo-Babylonian as suggested in the legend but from the same period as those illustrated on Pl. 35 : 3 where they are more correctly dated to the 'Hammurabi period'.

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*Fars (Iran)*
*Tall-i Malyān* : SUMNER 1974, fig. 8 : b.

## Group 100 B 2 (Pl. 65 : 1 to Pl. 67 : 2)

This group is related to Group 100 A 2 immediately above, consisting of similarly elongated ovoid jars with ring bases. The necks, which are set off from the body by a ledge or one or more grooves, are either straight or slightly curved and flare outward. The necks of examples from the peripheral areas also have a ridge or are slightly thickened just below the rim (Pl. 65 : 6, Pl. 66 : 5-6 and Pl. 67 : 1-2). One example from the Northern Alluvial Plain also has a slightly thickened neck (Pl. 65 : 3). The rims themselves are outwardly thickened and beveled.

Heights range from 28 to 41 cm. However, examples corresponding to the smallest jars of Group 100 A 2 (Pl. 63 : 1 and 5) are missing from this group. The ovoid bodies of 18th-century examples are generally slimmer (esp. Pl. 65 : 1 and 5-6) than the bodies of the later jars, which tend to have a wider profile and are slightly more rounded (Pl. 66 : 1 - Pl. 67 : 2), sometimes even baggy, especially on the periphery (Pl. 67 : 1-2). The later examples also tend to be larger.

This group is found in the Northern Alluvial Plain between the 18th century and the end of the 17th. It is present in the Middle Euphrates during the 17th century, as well as in the Diyala Basin from the late 18th century through the first half of the 16th. This is a northern Babylonian form, which is also found on the northern periphery.

The time-ranges of Groups 100 A 2 and 100 B 2 are nearly identical, which reinforces the assessment that they are variants of the same basic form, a form that first arose in northern Babylonia. Group 100 A 2, with simple rims, appeared in northern Babylonia around the middle of the 18th century, and then, on present evidence, spread minimally to southern Babylonia during the first half of the 17th century. However, it did not show up in the northern peripheral areas at all. The situation is the opposite with Group 100 B 2. This beveled-rim group, which was also being produced in northern Babylonia by the middle of the 18th century, moved northward into the Diyala Basin relatively quickly. It subsequently spread into the Middle Euphrates region, but it never appeared in southern Babylonia.

*COMPARANDA*

*Northern Alluvial Plain*

*Kish* : DE GENOUILLAC 1925 : Pl. XVIII : 3, center = Pl. 55 : 5.
LANGDON 1924, Pl. 32 : 3, center left, erroneously dated Neo-Babylonian.
LANGDON 1924, Pl. 35 : 3, left (lying vessel).

*Sippar (Abu Habbah)* : AL-JADIR 1987, 200, illustr. **3** : b and illustr. **8** : h on p. 202 (photos) ; see also p. 193, illustr. 18 : 2.
*Sumer* 54, Pls. **46** : 17, 20 and 21 (neck/rim sherds) and **48** : 2-4. See also Pl. 48 : 1 and 6 with a possible flat base (100 B 1).

*Tell ed-Dēr* : besides the vessels illustrated here on Pls. 65 to 67, see also :
*TD* 1, Pl. 22 : 1-3.

*Middle Euphrates*

*Terqa* : THUREAU-DANGIN and DHORME 1924, Pl. 59 : 6.
TASSIGNON 1997, fig. 40 : 10-11.

*Diyala Basin*

*Ishchali* : *OIP* 63, Pl. 171 : C.228.340b.
*Tell Asmar* : *OIP* 63, Pl. 171 : C.228.340a.
*Tell Haddad* : BURHAN SHAKIR SULAIMAN 2003-04, 110, fig. 14 : 855.
*Tell as-Sib* : HAAZIM MUHAMMAD AL-NAJAFII 1987-88, illustr. on p. 71, right ; see also illustr. on pp. 88 and 89 (all photos).
GHASSAN 1995, Pl. 124 : 405 and 406.
*Tell Bakr Awa (Shahrizor Plain)* : MUHAMMAD BAKIR AL-HUSAINI 1962, Table 7 : 9 (close to our Pl. 65 : 5 but probably illustrated at an incorrect scale).
*Tell Halawa* : GHASSAN 1995, Pl. 90 : 226, 227 and 229.
*Tell Suleimah* : GHASSAN 1995, Pl. 124 : 404 and 407.

## FAMILY 105

Family 105 consists of medium-sized jars with elongated ovoid bodies, ledge shoulders and short necks. There are two groups. Group 105 B 2 is the principal shape of the family, while Group 105 A 2 has a variant rim.

## Group 105 A 2 (Pls. 67 : 3-8)

Group 105 A 2 includes medium-sized jars with elongated ovoid bodies. The maximum diameter of the body is at or below the mid-line of the body. There is a sometimes a very narrow ledge, sometimes only a groove, marking the constriction at the base of a short neck (Pl. 67 : 3-4 and 6-8). The neck generally flares slightly outward. Rims are usually rounded. Vessels are occasionally decorated in dark paint (Pl. 67 : 3).

Group 105 A 2 is found only in the Southern Alluvial Plain. This relatively small group is attested during the 19th through early 17th centuries (Isin-Larsa Period). The finds from Nippur anchor the group's chronology.

*COMPARANDA*

*Southern Alluvial Plain*

*Nippur* : besides Pl. 67 : 4 and 7-8 illustrated here, see also :
*OIP* 78, Pl. 95 : 9-10 (both small).

*Telloh* : DE GENOUILLAC 1936, Pl. 123 : 4a.

*Ur* : WOOLLEY 1965, type 47; erroneously dated Cassite and NB (p. 99).

*Warka* : besides Pl. 67 : 3 and 5-6 illustrated here, see also :
*AUWE* 10, Pl. 29 : p (ring base, see *UVB* 18, Pl. 24 : a).

## Group 105 B 2 (Pls. 68 : 1-10)

Group 105 B 2 is made up of medium-sized jars with elongated ovoid bodies. The maximum diameter of the body is at or below the mid-line of the body. There is a generally a narrow shoulder or ledge marking the constriction at the base of a short neck. The shape and orientation of this short neck varies from straight and vertical (Pl. 68 : 9) to concave and outwardly flaring (Pl. 68 : 3). The necks terminate in rims that are outwardly thickened and beveled. The rim is occasionally painted in black (Pl. 68 : 6). Sometimes there are several horizontal incisions on the upper body (Pl. 68 : 2).

Group 105 B 2 is found in both the Northern and Southern Alluvial Plains. In the South, the earliest dated example comes from the end of the 20th century (Pl. 68 : 10). Plate 68 : 8 is 19th century. Plate 68 : 3 can be placed around or after the middle of the 18th century ; Plate 68 : 6 can be similarly dated. The other illustrated vessels from southern Babylonia have been arranged according to their shapes in relation to the more closely dated examples. The sides of the early examples are more vertical or slightly inturned (Pl. 68 : 8-10). In the 18th century the shape becomes more rounded and baggier (Pl. 68 : 2-7). Group 105 B 2 had the later, baggier profile when it entered northern Babylonia during the 18th century (Pl. 68 : 2) ; it continued to be produced in the North through the early 17th century. At that time the position of the maximum body diameter was beginning to rise (Pl. 68 : 1).

Group 105 B 2 is present in the Diyala and also in the Middle Euphrates.

As can be seen, the evidence suggests that Group 105 B 2 began as a southern group in the late 20th century. Group 105 A 2 was a round-rim variant of the main group that began to be made in the South around the beginning of the 19th century. By the 18th century, however, one of these groups, Group 105 B 2 had

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spread to the North. Both groups continued to be produced into the 17th century, but before the end of that century the production of both had ceased.

*COMPARANDA*

*Northern Alluvial Plain*

*Tell ed-Dēr* : besides the vessels illustrated on Pl. 68, see also : *TD* 1, Pl. 21 : 3.

*Southern Alluvial Plain*

*Fara* : MARTIN 1983, fig. 2 : 2 = MARTIN 1988, fig. 41 : 15.
*Tell al-Wilaya* : HUSSEIN *et al.* 2009, fig. 29 : d and e ; see p. 22 for chronological information.
*Telloh* : DE GENOUILLAC 1936, possibly Pl. XXIX : 1022.
*Warka* : besides Pl. 68 : 5 and 7 illustrated here, see also : *AUWE* 10, Pl. 19 : b and Pl. 20 : b. VAN ESS 1988b, fig. 7 : 31.
*Ur* : QASSIM R. HANEEN 2003-04, 47, fig. 30. WOOLLEY 1934, type 76. WOOLLEY and MALLOWAN 1976, types **93a** and **125**.

*Middle Euphrates*

*Tell al-'Usiyeh* : SABAH JASIM ABDUL-AMIR, 1988, possibly fig. 31 : left.

*Diyala Basin*

*Tell Halawa* : GHASSAN 1995, Pl. 101 : 279.

## FAMILY 110

This family includes two main groups of typically large vessels, the first tall and essentially cylindrical in shape (Group 110 A $_2$). The second group has a more ovoid shape with a low maximum diameter (Group 110 B $_2$). These vessels typically have ring bases, though smaller, flat-based variants also appear (fig. 10 and Group 110 B $_1$).

### Group 110 A $_2$ (Pl. 69 : 1-5)

The vessels in this group are nearly tubular in profile, though in some cases their bodies have the profile of a narrow barrel. There is normally a ring base, though flat bases occur in Susiana (fig. 10). The shoulder, such as it is, is marked by a ridge, triangular in section, which represents the line where the potter joined the separately created neck to the body. The neck and rim together form a concavity. The rim itself is outwardly thickened and rounded or beveled on its upper side.

Our best evidence is that this is a 20th-century (Ur III Period) group in northern and southern Babylonia, but it possibly continued to be produced in the 19th century, as well. The dates of the examples shown in Plate 69 : 2-3 are not narrowly fixed ; they come from a context that is earlier than the mid-18th century, that is, before the initial construction of the Sînkāšid Palace at Warka.[191] The group is also attested in the Diyala; a published example from the Lower Diyala, not illustrated here because of the highly stylized nature of the drawing, is probably to be dated to the 19th century (see *Comparanda* under Tell Asmar). The group has been found in Susiana, as well.

*COMPARANDA*

*Northern Alluvial Plain*

*Tell ed-Dēr* : besides Pl. 69 : 1 illustrated here, see also : *TD* 4, Pl. 8 : 15.

*Southern Alluvial Plain*

*Nippur* : besides Pl. 69 : 4 illustrated here, see also : *OIP* 78, Pl. 85 : 5 and 6 (Ur III). *OIP* 129, Pl. 115 : 9 (Ur III).
*Ur* : HALL 1930, 182, fig. 143 : second vessel from right. WOOLLEY 1934, type 75. WOOLLEY 1965, type 46. "Two examples come from the graves NW of the Temenos wall, which are probably Kassite" (p. 99) ; we disagree with this date.

191 *UVB* 18, p. 36.

Fig. 10. Vessel with a flat base from Group 110 A.
Susa : GS-7129, B, Level VI *ancien*, *rosâtre*, ø rim : 79. *MDP* 47, Pl. 18 : 8.

*Warka* : VAN ESS 1991a, 93, Pl. 105 : 9.

*Diyala Basin*

*Tell Asmar* : *OIP* 63, Pl. 170 : C.208.440.

*Susiana*

*Chogha Pahn* : *IVth Annual Symp., Tehran*, 1976, possibly fig. 3 : b.
*Susa* : DE MECQUENEM 1943, fig. 70 : 32.

### Group 110 B $_1$ (Pl. 70 : 1)

Group 110 B $_1$ is ovoid in shape with a low maximum diameter. It has a flat base, which is almost certainly unfinished. At the base of the neck there is a ridge with a triangular section. Because the illustrated vessel is relatively small and could have been thrown in one piece, its ridge may not have served to mask a line of attachment between neck and body and may just have been applied as decoration. This group is an infrequent, small variant of the principal group, Group 110 B $_2$ (Pl. 70 : 2-9), and, like it, should be dated primarily to the 20th century (Ur III Period). This flat-based group has been found in the Southern Alluvial Plain and in Susiana.

*COMPARANDA*

*Southern Alluvial Plain*

*Warka* : *AUWE* 10, Pl. 11 : *Grab* 16a.

*Susiana*

*Susa* : DE MECQUENEM 1943, fig. 70 : 33. PONS 1991, Pl. 28 : 7 (Exc. de Mecquenem).

### Group 110 B $_2$ (Pl. 70 : 2-9)

The vessels of Group 110 B $_2$ have a low maximum body diameter, but range from being taller and thinner to being shorter and stouter (compare Pl. 70 : 2-3 with Pl. 70 : 4, 6 and 8-9). They have ring bases. The shoulder, such as it is, is a triangularly-shaped ridge, representing the attachment of the separately formed neck to the body. The neck and rim together form a concavity. The rim itself is everted. It is outwardly thickened and generally rounded or beveled on its upper surface. The rim of

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Plate 70 : 2, however, has a horizontal upper surface. The Susa vessels in general are shorter and broader than those from Babylonia.

The vessels of this group are found in northern (see *Comparanda*) and southern Babylonia, the Diyala and Susiana. The group has probably also been found in the Gulf. The best dated examples from the Southern Alluvial Plain come from the 20th century (Pl. 70 : 3 and 6), though it is possible that the shape continues into the 19th century. The sherd from Tell ed-Dēr cited in the *Comparanda* is also from a 20th-century context. At Susa the group is dated to the 20th and 19th centuries (Pl. 70 : 8-9).

*COMPARANDA*

*Northern Alluvial Plain*

*Tell ed-Dēr* : *TD* 4, Pl. 8 : 15.

*Southern Alluvial Plain*

*Bismaya* : WILSON 2012, Pl. 89 : e.

*Nippur* : besides Pl. 70 : 3 and 6 illustrated here, see also : *OIP* 78, Pl. 85 : 1.

*Fara* : MARTIN 1983, fig. 2 : 7 = MARTIN 1988, fig. 42 : 1 ; very wide diameter!

*Telloh* : DE GENOUILLAC 1936, Pls. **XXVIII** : 2793 and 3755 and **XXIX** : 614.

*Warka* : besides Pl. 70 : 2 illustrated here, see also : *AUWE* 10, Pl. 11 : *Grab* 15a (photo).

*Gulf*

*Failaka* : PIC 2008, probably fig. 15 : 76.
HØJLUND 2012, probably fig. 4 : 3.

*Susiana*

*Susa* : besides Pl. 70 : 8 and 9 illustrated here, see also :
DE MECQUENEM 1934, fig. 55 : 12.
*Id.* 1943, figs. **65** : 25 and **70** : 33.
*Id.* 1953, Pl. 18 : 22, erroneously dated 1250-1100 BC.
*MDP* 46, Pl. 4 : 11 ; see also Pl. 3 : 1 (= Pl. 66 : 3) and 13, both with incised decoration.
PONS 1991, Pl. 29 (Louvre, *fonds ancien* ; Exc. de Mecquenem, de Morgan).

## FAMILY 115

Family 115 is made up five small groups of tall, narrow cylindrical bottles.

### Group 115 A$_2$ (Pl. 71 : 1-2)

This group contains tall cylindrical bottles having a ring base. The profile has a low maximum diameter and tapers slightly inward toward the neck. The constriction at the base of the neck is marked by a narrow ledge (Pl. 71 : 1) or a ridge (Pl. 71 : 2). The neck itself is straight and flaring. The rim is either rounded or outwardly thickened and beveled. The example from the Iraqi excavations at Tell ed-Dēr in the Northern Alluvial Plain (Pl. 71 : 1), has been placed in the 16th century, but its chronological position is not certain. Examples from the Lower Diyala Basin (Pl. 71 : 2), can be dated to the 17th and 16th centuries. The group is also present in the Middle Tigris Basin and possibly also in southern Babylonia.

*COMPARANDA*

*Southern Alluvial Plain*

*Nippur* : *OIP* 78, possibly Pl. 96 : 11, neck broken.

*Middle Tigris Basin*

*Assur* : HALLER 1954, Pl. 1 : ak for a similar example to our Pl. 71 : 1, but with a less everted neck (found in a burial) = HOCKMANN 2010, Pl. 94 : 21410q.

### Group 115 A$_3$ (Pl. 71 : 3)

This group contains tall cylindrical bottles having a convex base. The profile has a low maximum diameter and tapers slightly inward toward the neck. The constriction at the base of the neck is marked by a narrow ledge. The neck itself is straight and flaring, and the rim is outwardly thickened and beveled. The illustrated example comes from the Iraqi excavations at Tell ed-Dēr in the Northern Alluvial Plain. It has been placed in the 16th century, but its chronological position is not certain. Examples have also been identified in the Lower Diyala Basin and in Susiana.

*COMPARANDA*

*Diyala Basin*

*Tell Harmal* : ADIL NAJI 1961, Pl. 3 : 62546 (photo).

*Susiana*

*Susa* : DE MECQUENEM 1934, fig. 70 : 18.

### Group 115 B$_2$ (Pl. 71 : 4)

This group contains tall cylindrical bottles having a ring base. The profile has its maximum diameter in the middle of the body. There is a narrow ledge-like shoulder at the bottom of the neck. The neck itself is straight and nearly vertical. The small rim is outwardly thickened and beveled. This shape is attested in the Southern Alluvial Plain. The illustrated example has been placed in the 18th century, based on the dates of Pl. 71 : 5-6, similarly shaped bottles excavated at Tell ed-Dēr in the Northern Alluvial Plain.

*COMPARANDA*

*Southern Alluvial Plain*

*Mashkan-shapir* : STONE and ZIMANSKY 2004, fig. 50 : AbD 87-194.

### Group 115 C$_3$ (Pl. 71 : 5)

This group consists of tall cylindrical bottles having a convex base. The sides are virtually parallel. There is a narrow ledge-like shoulder at the base of the neck. The rather elegant neck has a horizontal ridge at its mid-point. Below the ridge the neck is concave ; above the ridge it is vertical. The rim is outwardly thickened and horizontal. The illustrated example comes from the Belgian excavations at Tell ed-Dēr in the Northern Alluvial Plain and can be dated to the end of the 18th century. Comparable examples from the Lower Diyala are approximately contemporary.

*COMPARANDA*

*Diyala Basin*

*Tell ed-Dhiba'i* : AL-GAILANI 1965, Pl. 1 : 4 (photo).
MOHAMMAD ALI MUSTAFA 1949, Pl. V : 30.

### Group 115 D$_2$ (Pl. 71 : 6-7)

This group consists of tall cylindrical bottles, one example of which has a ring base, while the other is incomplete. There is a narrow ledge-like shoulder at the base of the neck. The neck is straight and flaring, and it has multiple ridges. The rounded top ridge forms the rim. Examples come from Tell ed-Dēr in the Northern Alluvial Plain and Larsa in the South. The fragmentary Tell ed-Dēr bottle has been dated to the early 18th century, which helps date the more complete Larsa example. The group is also attested in the Diyala.

*COMPARANDA*

*Diyala Basin*

*Tell Asmar and Ishchali* : *OIP* 63, Pl. 189 : C.758.510.

## FAMILY 120

Family 120 is made up of two minor groups of tall, more-or-less conical bottles.

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## Group 120 $A_2$ (Pl. 72 : 1-2)

This group contains tall bottles with a maximum diameter above the midpoint of the body. The lower body tapers inward to the narrow base, which gives the body a slightly conical profile. The constriction at the neck can be marked by a narrow ledge (Pl. 72 : 1). The neck itself flares outward. The rim is outwardly thickened (Pl. 72 : 1) or rounded (Pl. 72 : 2). Examples of uncertain date come from the Iraqi excavations at Tell ed-Dēr in the Northern Alluvial Plain and from al-Shuweimiya in the Middle Euphrates. An unillustrated example from the Lower Diyala with a stump base is also poorly dated. However, the bottles have been placed in the 16th century, based on the date of similar vessels from Group 120 $B_2$ below.

*COMPARANDA*

*Middle Euphrates*

*al-Shuweimiya* : besides Pl. 72 : 2 illustrated here, see also : SABAH JASIM ABDUL-AMIR 1988, fig. 60 : 10, 11, 13 and 18 (fig. 60 : 9, 15 and 51 have their maximum diameter near the midpoint of the body).

*Diyala Basin*

*Ishchali* : *OIP* 63, Pl. 184 : C.548.720 (with a stump base).

## Group 120 $B_2$ (Pl. 72 : 3-5)

This group consists of tall conical bottles. The body tapers from its maximum diameter at the well-defined shoulder down to the narrow base. In two examples the base is a reshaped solid foot (Pl. 72 : 3-4). The slightly curved neck flares sharply outward from the shoulder. The simple rim is rounded. The illustrated examples from Tell ed-Dēr in the Northern Alluvial Plain can be dated to the middle of the 16th century (Pl. 72 : 3-4), which helps to date the vessel from a surface burial at al-Shuweimiya in the Middle Euphrates.

*COMPARANDA*

*Middle Euphrates*

*al-Shuweimiya* : besides Pl. 72 : 5 illustrated here, see also : SABAH JASIM ABDUL-AMIR 1988, fig. 60 : 7 (same shape but with a thin wall).

# FAMILY 125

This family is made up of two small groups of relatively slender vessels with convex bases and wide mouths. Bodies are cylindrical or have low maximum diameters.

## Group 125 $A_3$ (Pl. 72 : 6-10)

Members of Group 125 $A_3$ have convex bases, bag-shaped or cylindrical bodies, ledge-shoulders, and wide concave and flaring necks. The necks and/or rims have multiple ridges.

A single rim sherd comes from a context datable to around 1900 at Tell ed-Dēr in the Northern Alluvial Plain. It is also attested in the Diyala and in the Middle Euphrates. In the South and in the Diyala early examples can be dated to the 20th century. A lone 18th-century example (Pl. 72 : 7) from Nippur looks like an outlier in terms of the rest of this group. It is possible that this was an earlier, that is, 20th-century vessel that only entered the archaeological record much later. However, Group 135 $B_3$, the largest group of these related convex-based, wide-mouthed vessels, continues down to the beginning of the 17th century, which leaves open the possibility that this example is indeed late and that other late examples of Group 125 $A_3$ may also exist.

*COMPARANDA*

*Northern Alluvial Plain*

*Tell ed-Dēr* : besides Pl. 72 : 6 illustrated here, see also : *TD* 4, Pl. 14 : 14-15.

*Southern Alluvial Plain*

*Isin* : *Isin* 3, Pl. 26 : 1.

*Nippur* : besides Pl. 72 : 7-9 illustrated here, see also : *OIP* 78, Pl. 84 : 4.

*Ur* : WOOLLEY 1934, type 57.

*Warka* : *AUWE* 10, Pl. 6 : a1-a2.

*Middle Euphrates*

*Tell al-'Usiyeh* : FUJII *et al*. 1984-85, fig. 6 : 18 = FUJII and MATSUMOTO 1987, fig. 88 : top right = OGUCHI, K. & H. 2006, fig. 14 : b.
OGUCHI, K. & H. 2006, fig. 14 : a.

*Diyala Basin*

*Tell ed-Dhiba'i* : AL-GAILANI 1965, Pl. 1 : 4.

*Tell Yelkhi* : besides Pl. 72 : 10 illustrated here, see also : BERGAMINI 2002-03, Pl. 9 : 19.

## Group 125 $B_3$ (Pl. 73 : 1-2)

Group 125 $B_3$ is made up of slender cylindrical vessels with convex bases. A narrow ledge at the top of the body marks the base of the neck, but these forms lack a true shoulder. Short concave necks end in vertically oriented rims with multiple ridges. The mouths are wide. The walls of the vessels in this group are thick. The few examples from southern Babylonia and the Diyala Basin date between the 20th and 19th centuries. The group is also attested in Susiana.

*COMPARANDA*

*Southern Alluvial Plain*

*Telloh* : DE GENOUILLAC 1936, Pl. XXX : 3769.

*Diyala Basin*

*Tell ed-Dhiba'i* : MOHAMMAD ALI MUSTAFA 1949, similar to Pl. IV : 3.

*Susiana*

*Susa* : PONS 1991, Pl. 27 : 2-6 (Louvre, *fonds ancien*).

# FAMILY 130

Family 130 consists of two groups of vessels with wide mouths and convex bases that are almost pointed. Shoulders are rounded and necks are tall and flaring.

## Group 130 $A_3$ (Pl. 73 : 3-4)

Group 130 $A_3$ is a distinctive group in the early 2nd millennium, consisting of small vessels with nearly pointed convex bases, bodies with high maximum diameters, rounded shoulders, flaring necks bearing a single ridge and horizontal or outwardly beveled triangular rims.

These vessels are attested in southern Babylonia and can be dated to the 20th century (Ur III Period). They developed from similar vessels of the preceding Akkadian Period.[192] Akkadian examples have been included in the *Comparanda*, which show that the group is also known in both northern Babylonia, the Sinjar, the Middle Tigris, the Diyala, the Gulf and Susiana.

*COMPARANDA*

*Northern Alluvial Plain*

*Umm el-Jīr* : GIBSON 1972a, figs. **42** : k (see fig. 5 : right which shows the detail of the rim) and possibly **43** : B 4 : 9 (Akkadian-Ur III). >

192 The earlier counterparts to the vessels of Group 130 $A_3$ date to the 21st-22nd centuries. Both our Group 130 $A_3$ and those Akkadian examples share an outwardly thickened, triangular and usually beveled rim with a distinct ridge just beneath on an outwardly flaring neck. As a rule, however, the earlier examples have lower and less pronounced shoulders than are present in Group 130 $A_3$. For these earlier vessels, see *OIP* 78, Pl. 80 : 18 (Nippur) and STARR 1937, Pl. 52 : G (Nuzi). A clearly related Akkadian shape has a taller, more ovoid body (*OIP* 63, Pl. 160 : B.556.540 [Tell Asmar]). Some examples of this second shape are larger (BERGAMINI 2002-03, Pl. 9 : 8 [Yelkhi], STARR 1937, Pl. 52 : F [Nuzi]).

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*Southern Alluvial Plain*

*Bismaya* : WILSON 2012, Pl. 90 : f.
*Nippur* : besides Pl. 73 : 3 illustrated here, see also :
*OIP* 78, Pl. 80 : 18 (Late Akkadian).
*OIP* 129, probably Pl. 106 (Akkadian-Ur III).
*Tell al-Wilaya* : See HUSSEIN *et al*. 2009, fig. 22 : g and h for possible Early Akkadian shapes ; see p. 22 for chronological information.
TARIQ MADHLUM 1960, fig. 3 : 4.
*Ur* : QASSIM R. HANEEN 2003-04, 47, fig. 29 : 1432.
WOOLLEY 1934, types **44a** and **44b**.
WOOLLEY 1965, type 93; "…the type goes back to the Sargonid period" (p. 100).

*Sinjar*

*Tell Taya* : READE 1968, Pl. 85 : 15 ( "looks like an import" [p. 263], Akkadian-Early Ur III).

*Middle Tigris Basin*

*Assur* : BEUGER 2005, Katalog 2, Pl. 55 : 7.
DITTMANN 1997-98, fig. 10 : 1.
HALLER 1954, Pl. 1 : h (= HOCKMANN 2010, Pl. 22 : 2489d), $h_1$ and q (= HOCKMANN 2010, Pl. 20 : 2305$i_2$).
HOCKMANN 2010, Pls. **66** : 20533a, **72** : 20554w and **79** : 20573u and 20573i.
*Nuzi* : STARR 1937, Pl. 52 : G (Akkadian).
*Tepe Gawra* : SPEISER 1935, Pls. **27** : a, 3 (photo) and **69** : 130 (drawing, without ridge on neck ; probably Akkadian-Early Ur III).

*Diyala Basin*

*Tell Asmar* : *OIP* 63, Pl. 160 : B.556.540 (Akkadian).

*Gulf*

*Failaka* : PIC 2008, probably fig. 15 : 75.
HØJLUND 2012, fig. 4 : 4, also 4 : 1 but with a larger rim diameter.
*Qala'at al-Bahrain* : HØJLUND and ANDERSEN 1994, figs. 260-261 (rims) and probably 257-259.
LOMBARD (ed.) 1999, 56, Nos. 7-8 (photo).

*Susiana*

*Susa* : DE MECQUENEM 1943, fig. 69 : 14.
PONS 1991, Pl. 28 : 1-5 (Exc. de Morgan and de Mecquenem).

## Group 130 $B_3$ (Pl. 73 : 5-10)

Group 130 $B_3$ consists of small vessels with convex bases, bodies with high maximum diameters, rounded shoulders, flaring necks and vertical or slightly flaring rims with multiple ridges.

These vessels are attested in the Southern Alluvial Plain, as well as in the Diyala Basin, where they can be dated to the 20th century and earlier. At Susa they are first attested from the middle of the 20th century (Ur III Period) and continue there until the middle of the 19th century. The *Comparanda*, which include examples dated to the Akkadian Period, show that this group is also attested in the Northern Alluvial Plain, the Middle Tigris Basin and the Gulf.

*COMPARANDA*

*Northern Alluvial Plain*

*Umm el-Jīr* : GIBSON 1972a, figs. **42** : j and l (see fig. 5 : left and center which show the detail of the rim) and probably **46** : Phase III, 27 (Akkadian).

*Southern Alluvial Plain*

*Isin* : *Isin* 1, probably Pl. 27 : IB 264.
*Mashkan-shapir* : STONE 1995, fig. 4 : right.
STONE and ZIMANSKY, 2004, fig. 50 : AbD 87-167.
*Nippur* : *OIP* 129, Pl. 120 : 5-6 (Late Akkadian-Ur III)
*Tell al-Wilaya* : HUSSEIN *et al*. 2009, fig. 22 : i, k and probably j ; see p. 22 for chronological information.
TARIQ MADHLUM 1960, fig. 3 : 1.
*Telloh* : DE GENOUILLAC 1936, Pls. **XXXI** : 2403 and **XXXIII** : 606.
*Ur* : WOOLLEY 1934, type 224.
WOOLLEY 1965, type 94 ; we disagree with a Cassite date (cf. p. 100).
*Warka* : besides Pl. 73 : 5-7 illustrated here, see also :
*AUWE* 10, Pl. 5 : *Grab* 10a.
VAN ESS 1991a, 95, Pl. 107 : 33.
VAN ESS 1993, fig. 9 : 130 which is close to our Pl. 73 : 10 (Susa).

*Middle Tigris Basin*

*Assur* : HALLER 1954, Pl. 1 : n (= HOCKMANN 2010, Pl. 84 : 21336ah) , $n_1$ (= HOCKMANN 2010, Pl. 84 : 21336ai) and r (= HOCKMANN 2010, Pl. 20 : 2305$i_1$).
HOCKMANN 2010, Pls. **45** : 13109d (photo), **48** : 14533f and 14533g, (photos), **56** : 20455s (vertical neck and rim with two ridges), **67** : 20550c, 20550h, 20550i and 20550$i_2$, **72** : 20554o, 20554v, 20554ab, 20554ac and 20554ai, **79** : 20573i and 20573r (both with vertical necks), and **84** : 21336l
*Nineveh* : MCMAHON 1998, possibly fig. 5 : 25.

*Diyala Basin*

*Tell Genj* : WILSON-BRIGGS *et al*. 1984, probably Pl. 4 : 6 (sherd).
*Tell Halawa* : GHASSAN 1995, Pl. 100 : 274-275.

*Gulf*

*Bahrain Cemeteries* : LOWE 1986, see p. 76 and fig. 6.

*Susiana*

*Susa* : besides Pl. 73 : 9-10 illustrated here, see also :
DE MECQUENEM 1934, fig. 76 : 26 ; *id*. 1943, fig. 69 : 17.
*MDP* 46, Pl. 3 : 8.
*MDP* 47, Pl. 16 : 10-11.
PONS 1991, Pl. 27 : 2-5 (Louvre, *fonds ancien* ; Exc. de Morgan and de Mecquenem).

# FAMILY 135

Family 135 is made up of wide mouthed vessels with generally convex bases, though two smaller groups within the family have ring bases. The primary group is Group 135 $B_3$, which has a characteristically cylindrical body. These vessels tend to be wider than those of Family 125.

## Groups 135 $A_2$ (Pl. 73 : 11) and 135 $A_3$ (Pl. 73 : 12-13)

Groups 135 $A_2$ and 135 $A_3$ include small vessels with shapes that can be described as sub-cylindrical, hemispherical or even globular. They also have narrow ledge shoulders and short, wide necks that are concave and outwardly flaring. Their everted rims are either triangular and outwardly beveled in section (Pl. 73 : 11) or curved over and rounded (Pl. 73 : 12-13). Group 135 $A_2$ has a ring base ; the bases of Group 135 $A_3$ are convex. These groups represent minor variants of Group 135 $B_3$. They lack the cylindrical body characteristic of the basic shape, apparently because of their small size.

Group 135 $A_2$ is attested only in the Southern Alluvial Plain. The illustrated vessel (Pl. 73 : 11), from Larsa, cannot be dated closely. Group 135 $A_3$ is found in both the Northern and Southern Alluvial Plains, as well as in the Diyala Basin. The Tell ed-Dēr example (Pl. 73 : 12) can be dated to the early 18th century. The Diyala vessel (Pl. 73 : 13) has been placed at around 1800 based on its similarity to the example from Tell ed-Dēr.

*COMPARANDA*

*Southern Alluvial Plain*

*Telloh* : GENOUILLAC 1936, Pl. XXXI : 1108 (135 $A_3$).
*Ur* : WOOLLEY and MALLOWAN 1976, type 80 (135 $A_2$).

## Group 135 $B_3$ (Pl. 74 : 1-16)

Group 135 $B_3$, the chief group in Family 135, consists of vessels with essentially cylindrical bodies ; convex (round) bases ;[193] narrow, well-articulated ledge-shoulders ; short, wide

[193] The center of the base of Plate 74 : 7 is flat.

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necks that are either concave or outwardly flaring ;[194] and everted rims that are either triangular in section or curved over and tapered. An example from the Hamrin site of Tell Halawa, illustrated here as fig. 11, also belongs with this group, although it lacks the characteristic well-articulated ledge-shoulder. The very small vessel in Plate 74 : 11 is at the limit between this group and Group 135 A 3. A second very small example, from Larsa, is shown here as fig. 12.

Fig. 11. A Hamrin example of Group 135 B 3 lacking a well-articulated ledge-shoulder.
Tell Halawa : 31-1, A, Level IV, ø rim : 103. GHASSAN 1995, Pl. 100 : 276.

Fig. 12. A very small (miniature ?) vessel of Group 135 B 3.
Larsa : L. 56, *Palais de Nūr-Adad*, 10YR 6,5/1, ø rim : 33.
Exc. Parrot, 1933. Louvre, AO 17063. Drawn at the Louvre.

The size of these vessels is fairly standard, with the height of most examples falling between 120 and 180 mm. Plate 74 : 11, with a height of 75 mm, and Plate 74 : 2, at 250 mm, are very small and very large for the group, respectively. Plate 74 : 16, a rim sherd, is likely to be from a very large vessel.

Group 135 B 3 first appears in both northern and southern Babylonia during the latter half of the 20th century (late Ur III Period) and continues to be well attested in the 19th century (Early Isin-Larsa Period). Production ceases inside Babylonia sometime during the 18th century (Late Isin-Larsa Period). Vessels from Yelkhi in the Upper Diyala Basin are dated to the 18th through early 17th centuries. The group is well attested in Susiana between the 20th and 18th centuries. It is also attested in the Gulf.

194 The neck of Plate 74 : 8 is atypically vertical.

*COMPARANDA*

*Northern Alluvial Plain*

*Tell ed-Dēr* : besides Pl. 74 : 1-5 illustrated here, see also : *TD* 4, Pls. **15** : 15 and **19** : 6.

*Southern Alluvial Plain*

*Bismaya* : WILSON 2012, Pl. 90 : e ; with slightly conical body.
*Nippur* : besides Pl. 74 : 9-11 illustrated here, see also : *OIP* 78, Pl. 84 : 2 ; shorter and neck not well-articulated.
*Larsa* : CALVET *et al*. 2003, fig. 17 : I and k.
GASCHE in press, Pl. 4 : 107, sherd that probably belongs to Group 135 B 3 but with a rim that has not been attested elsewhere.
*Telloh* : DE GENOUILLAC 1936, Pls. **XXX** : 2242, **XXXI** : 1359, **80** : 1, right, and **82** : 1, right.
*Ur* : HALL 1930, 183, fig. 145 : left.
WOOLLEY 1934, types **39**, **40** and a less frequent variant illustrated by type **48**.
WOOLLEY and MALLOWAN 1976, types **67a** and **67b**.
*Warka* : *AUWE* 10, Pls. **12** : *Grab* 19b and **29** : o (large).

*Diyala Basin*

*Tell ed-Dhiba'i* : AL-GAILANI 1965, Pl. 1 : 11B (photo).
*Tell Halawa* : GHASSAN 1995, Pl. 100 : 276 (lacking a well-articulated ledge shoulder) = fig. 11 illustrated above.
*Tell Suleimah* : SALAH SALMAN RUMAIYDH 1984, 50, Pl. 10 : 2 (upper left).

*Gulf*

*Bahrain Cemeteries* : LOWE 1986, fig. 7.
*Failaka* : HØJLUND 1987, probably fig. 289.
PIC 2008, probably fig. 15 : 79.
*Qala'at al-Bahrain* : BIBBY 1972, Pl. XVI above : right.
LOMBARD (ed.) 1999, 57, Nos. 9-10 (photos).

*Susiana*

*Susa* : besides Pl. 74 : 14-16 illustrated here, see also : CARTER 1980, fig. 47 : 7 = Pl. VII : 4.
DE MECQUENEM 1928, fig. 36 : center right ; *id*. 1934, fig. 76 : 15 ; *id*. 1943, fig. 65 : 26.
*MDP* 47, Pl. 17 : 2, 3 (= Pl. 61 : 4) and 5-8.
PONS 1991, Pl. 25 (Louvre, *fonds ancien* ; Exc. de Mecquenem).

## Group 135 C 2 (Pl. 75 : 1-10)

Group 135 C 2 represents a very distinctive, diagnostic and widely attested group of decorated vessels. This group is essentially a variant of Group 135 B 3, produced as follows : a round-bottomed vessel of Group 135 B 3, having vertical walls, a ledge-like shoulder, a concave neck and a strongly everted rim, was made by the potter, who then attached a ring of clay around the vessel's lower part to create a high ring stand. This added ring of clay sometimes extends well up the sides of the vessel (Pl. 75 : 1-2 and 5). Typically, four vertically-pierced lugs were attached at the lower edge of the shoulder. These vessels were normally fired to a gray color (Pl. 75 : 9, *rouge,* is exceptional). The surface was divided into rectangular fields by incised or impressed bands. These fields, in turn, were decorated with incised and impressed naturalistic (birds, quadrupeds, fish and trees) and/or geometric designs that were filled with white paste.[195]

Well dated examples of Group 135 C 2 are rare in Babylonia. The archaeological contexts of relatively few of the pieces are secure. One from Nippur dates to the end of the Ur III Period (ca. 1900 ; Pl. 75 : 5). There is another from the early 18th century at Tell ed-Dēr (Pl. 75 : 1) ; this latter piece is clearly not of the highest quality and is smaller than other examples. From the decades on either side of 1800 come a number of examples from the Diyala Basin (Pl. 75 : 6-7).[196] Many are fragmentary, and

195 For an in-depth discussion of these decorated vessels, see BÖRKER-KLÄHN 1970 : 25-67.

196 A contemporary second group of incised and filled gray-ware vessels has been found in the Diyala and at Nuzi, along the foothills of the Zagros ; this group does not appear in Babylonia proper. They are smaller than the

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they may have been found in contexts post-dating the period of their manufacture. In any case, no examples post-date the middle of the 18th century.

The greatest number of complete vessels come from Telloh and from de Mecquenem's and de Morgan's excavations at Susa, but none can be well dated. Group 135 $C_2$ seems to be present in greatest numbers in Susiana, the Diyala and the far south, or southeast, of Babylonia. Examples appear less frequently in central and northern Babylonia. This pattern suggests that the shape arose first in Susiana, where the underlying group, Group 135 $B_3$, also occurs relatively frequently ; from there it spread principally in two directions, toward southern Babylonia and toward the Diyala Basin. Additionally, examples have been found in the Middle Euphrates, the Middle Tigris Basin and Western Iran (Tchogha Gavaneh).

From Assur (Middle Tigris Basin) comes a vessel that has clearly been influenced by examples from Group 135 $C_2$ (HOCKMANN 2010, Pl. 101 : 21809i), but it is nevertheless enough different that we have not included it in the group. In common with Group 135 $C_2$ this vessel has an everted rim and a high ring base that extends partway up the sides of the body. However, the central body of this vessel is tapered instead of cylindrical, and it has a flat, as opposed to a round, base. Additionally, its sides are undecorated.

Whether individual pieces were imported or made locally remains uncertain, despite attempts by scholars like BÖRKER-KLÄHN (1970) to identify the workshops where these vessels were made. It seems clear to us that, since Group 135 $C_2$ is from a technical standpoint an elaboration of Group 135 $B_3$, the history of the one group cannot be explained without simultaneously understanding the history of the other. Such an undertaking is, however, beyond the scope of the present study.

*COMPARANDA*

*Northern Alluvial Plain*

*Kish* : DE GENOUILLAC 1924, Pl. XX : 1 = Pl. 57 : 105 (sherd).

*Southern Alluvial Plain*

*Bismaya* : BÖRKER-KLÄHN 1970,[197] 51 (**Cf63**), Pl. 39 (with reference) = WILSON 2012, 50, Fig. 6.4.

*Larsa* : BÖRKER-KLÄHN 1970, 51 (**C66**) (with reference).

*Telloh* : besides Pl. 75 : 2 and 4 illustrated here, see also : BÖRKER-KLÄHN 1970, 34 (**Cf1**), Pls. 20-21 ; p. 37 (**Cf9**), Pl. 26 (Baghdad, IM 18713) ; p. 38 (**Cf10**), Pl. 27 (lower part of the vessel) ; p. 38 (**C11**), Pl. 27 ; p. 38-39 (**Cf12**), Pl. 27 (sherd) ; p. 42 (**Cf23**), Pl. 31 (sherd) ; p. 50 (**C59**), Pl. 39. All with reference(s).

*Warka* : BÖRKER-KLÄHN 1970, 43-44 (**Cf28**, with reference), Pl. 34 (two sherds [rim/shoulder and part of the body]). VAN ESS (1988a, fig. 38 : 226) suggests a reconstruction of this vessel but with an unusual low base.

*Middle Euphrates*

*Tell al-'Usiyeh* : FUJII *et al*., 1984-85, figs. **6** : 19 and **12** : 1 (photo) = FUJII and MATSUMOTO 1987, fig. 88, bottom = OGUCHI, K. & H. 2006, fig. 10a (photo) and 14 : h. FUJII *et al*., 1984-85, fig. 6 : 20-21 (= FUJII and MATSUMOTO 1987, fig. 88) and 22. OGUCHI, K. & H. 2006, fig. 10b (photo of 19 sherds).

*Middle Tigris Basin*

*Nuzi* : STARR 1937, Pl. 56 : I and L at least (sherds).

*Diyala Basin*

*R. McC. Adams' Diyala Survey* : BÖRKER-KLÄHN 1970, 43 (Cf26 and Cf32, with references), Pls. 34 and 35 (both sherds).

*Tell Abqa'* : HROUDA *et al*. 1982, fig. 8.

*Tell Asmar* : BÖRKER-KLÄHN 1970, 36 (**Cf7**), Pl. 24 (sherd) ; pp. 36-37 (**Cf8**), Pl. 25 (lower part of the vessel but base broken) ; p. 41 (**Cf17**), Pl. 30 (sherd) ; p. 41 (**Cf20**), Pl. 31 (sherd) ; pp. 41-42 (**Cf21**), Pl. 31 (sherd) ; p. 42 (**Cf24**), Pl. 32 (sherd) ; p. 43 (**Cf25**), Pls. 32-33 (large sherds of neck and central body) ; pp. 44-45 (**Cf29**), Pl. 34 (sherd) ; p. 45 (**Cf31**), Pl. 35 (sherd) ; p. 45 (**Cf33**), Pl. 35 (sherd) ; p. 46 (**Cf34**), Pl. 35 (sherd) ; p. 46 (**Cf35**), Pl. 35 (sherd) ; p. 46 (**Cf37**), Pl. 36 (sherd) ; p. 46 (**Cf38**), Pl. 36 (sherd). All with reference(s).

*Tell Halawa* : besides Pl. 75 : 6 illustrated here, see also : GHASSAN 1995, Pl. 35 : A and B (sherds).

*Tell Hassan* : FIORINA 1984, 287, fig. 23.

*Tell Songor B* : MATSUMOTO 1981, fig. 50 : 12 = MATSUMOTO and YOKOYAMA 1989, fig. 96 : 1.

*Tell Suleimah* : GHASSAN 1995, Pl. 55.

*Tell Yelkhi* : besides Pl. 75 : 7 illustrated here, see also : GABUTTI 2002-03, Pls. 134 : 1 (= BERGAMINI 1984, 236, fig. 65) and 140 : 1-2.

*Susiana*

*Susa* : besides Pl. 75 : 8-10 illustrated here, see also : BÖRKER-KLÄHN 1970, 34-35 (**Cf3**), Pl. 21 ; p. 35 (**Cf4**), Pl. 21 (sherd) ; p. 36 (**Cf6**), Pl. 24 (lower part of the vessel) ; pp. 40-41 (**Cf16**), Pl. 30 (sherd) ; p. 49 (**C58**), Pl. 39 ; p. 50 (**Cf60**), Pl. 39 (part of neck and base are missing) ; p. 50 (**Cf61**), Pl. 39 (base missing). All with reference(s).

*Western Iran*

*Tchogha Gavaneh* : KORDEVANI 1971, Persian section, 43, fig. 20 (sherd showing bird).

*Unknown provenances*

BÖRKER-KLÄHN 1970, 39 (**C 13**), Pl. 28 (Louvre, AO 16991) ; p. 39 (**Cf14**), Pl. 30 (Baghdad, IM 18691) ; p. 41 (**C18**), Pls. 30 and 62 (Berlin, VA 4284) ; p. 42 (**Cf22**), Pl. 31 (Baghdad, IM 18701) ; p. 45 (**Cf30**), Pls. 30 (Baghdad). All with reference(s).

## FAMILY 140

Family 140 includes three minor groups of small to medium-sized jars having bodies with low maximum diameters.

### Group 140 $A_2$ (Pl. 76 : 1-3)

Group 140 $A_2$ consists of small, wide-mouth jars with a ring base. The body is nearly cylindrical, although the maximum diameter is below the midpoint. The height of these vessels is approximately equal to their diameter. The short, wide, concave neck springs from a narrow ledge shoulder and terminates in a rounded rim or a horizontal or outwardly beveled triangular rim. These vessels, all from sites in the Southern Alluvial Plain, can be dated to the 19th century (Early Isin-Larsa Period).

*COMPARANDA*

*Southern Alluvial plain*

*Larsa* : CALVET *et al*. 2003, fig. 17 : f.

### Group 140 $B_2$ (Pl. 76 : 4-5)

This minor group is made up of small jars with a ring base. The ovoid body has a low maximum diameter. A concave neck of medium height springs from the ledge shoulder and terminates in an outwardly beveled flaring rim. The two whole examples are decorated with several parallel horizontal grooves just above the middle of the body.

Group 140 $B_2$ is attested in the Southern Alluvial Plain and can be dated to the 19th-18th centuries (Isin-Larsa Period).

*COMPARANDA*

*Southern Alluvial Plain*

*Larsa* : CALVET 2003, fig. 46 : 27.51.

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vessels of Group 135 $C_2$ and are less well made and finished. Their incised decoration is exclusively geometric. For the Diyala, see *OIP* 63, Pls. **122** : a-d and **152** : B.206.423a, B.206.423b, B.206.423c, B.206.423d and B.206.423e. For Nuzi, see STARR 1937, Pl. 56 : J-K and M-S.

197 For convenience, we use here J. Börker-Klähn's catalogue because it contains older references. However, we do not follow her classification by workshops.

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## Group 140 C (Pl. 76 : 6-10)

Group 140 C includes vessels with an ovoid body and a low maximum diameter. Concave or vertical-to-slightly-flaring necks spring from ledge shoulders. The necks are decorated with multiple ridges. The rounded or beveled top of the uppermost ridge forms the rim. Examples with ring and convex bases have been treated together because so few complete shapes are attested in Babylonia. A vessel of this group with a flat, possibly string-cut, base has been reported from Bismaya (see *Comparanda*).

This group as a whole cannot be closely dated. In the Northern Alluvial Plain a rim sherd (Pl. 76 : 6) comes from a context dating to around 1800, but because it is fragmentary, it may have been produced earlier ; another example, not closely dated, comes from Sippar (see *Comparanda*). The Isin and Larsa examples from the Southern Alluvial Plain have been placed in the 17th century based on the 17th-century find spot of Plate 76 : 7.[198] We are not confident of this relatively late dating and would not be surprised if these examples turn out to have an earlier date, perhaps in the 18th century.

The large vessel from Susa (Pl. 76 : 10) lacks stratigraphic provenience, and we have located it broadly in the 19th and 18th centuries, based on its overall profile and, in particular, the shape of its rim.

A whole example with ring base from Tell ed-Dhiba'i in the Lower Diyala basin, published only in photograph, is similar in shape to Plate 76 : 9, from Isin. The Dhiba'i vessel can be dated to the 19th-18th centuries (Isin-Larsa Period), based on its context.[199]

A group of vessels from Bahrain, the so-called "grave pots" or funerary jars, closely resemble the jars with convex bases in our Group 140 C and Group 145 $A_3$ (below). These vessels have cylindrical-to-ovoid-shaped bodies, convex bases and ridged and/or grooved vertical necks. The one characteristic of the Bahraini grave pots that is not shared by most of the comparable examples from Mesopotamia is a distinctive bright red-colored paste with white inclusions. Absent the red color, the Mesopotamian examples might be imitations of the Gulf ware in local clay.[200] The Bahraini vessels can be dated broadly to the early 2nd millennium NLC (LOWE 1986 ; POTTS 1990, 210-213 ; and LOMBARD [ed.] 1999, 56-57 and 62), which fits well with the time-range of the Babylonian examples.

Even though its rim has a slightly different shape, we have included in the *Comparanda* for Group 140 C a sherd (rim through shoulder) from Larsa that has been identified as a possible import from Bahrain because it is bright red and has white inclusions.

Bahraini grave pots have several different profiles, not all of which are paralleled in Babylonia. The range of shapes can be seen in MUGHAL 1983, fig. 18 and Pl. 41 : 1-3, and IBRAHIM 1982, fig. 33-35 and Pl. 41-44 : 5, as well as among the *Comparanda* from sites in the Gulf.

*COMPARANDA*

*Northern Alluvial Plain*

*Sippar (Abu Habbah)* : AL-JADIR 1987, 193, illustr. 18 : 1 (drawing) = illustration 9 : a on p. 203 (photo), shape similar to our Pl. 76 : 9 but with a flat base and a maximum diameter near the midpoint of the body.

*Southern Alluvial Plain*

*Bismaya* : WILSON 2012, Pl. 89 : c.

*Isin* : besides Pl. 76 : 6 illustrated here, see also : *Isin* 3, Pl. 26 : 2.

*Larsa* : besides Pl. 76 : 8 illustrated here, see also : CALVET 2003, probably fig. 60 : 59.69 ; see also fig. 59 : 27.569 with a different rim shape, but said to have been imported from Dilmun.[201]

*Warka* : VAN ESS 1988a, fig. 19 : 134. Ring base and more globular body ; close to DENTON 1994, fig. 9 (Bahrain Cemeteries).

*Ur* : WOOLLEY 1934, type 225. WOOLLEY and MALLOWAN 1976, types **57c** (140 $C_2$) and **94** (140 $C_2$).

*Diyala Basin*

*Tell ed-Dhiba'i* : AL-GAILANI 1965, Pl. 1 : 9 (photo).

*Tell Owessat* : for similar but more globular vessels see JAKOB-ROST *et al.* 1983, figs. **26** (= Pl. 17) and **44**.

*Gulf*

*Bahrain Cemeteries* : possibly DENTON 1994, fig. 29. LOWE 1986, fig. 4.

*Qala'at al-Bahrain* : BIBBY 1972, fig. on p. 70 and Pl. XVI above : center. CRAWFORD 1998, 56, fig. 3.9 (photo). HØJLUND (ed.) 1999, fig. 38 (photo). HØJLUND and ANDERSEN 1994, possibly figs. 217 and 218. LOMBARD (ed.) 1999, 62, Nos. 21-25, second and third jars from left (photo).

## FAMILY 145

This family consists of two small groups of ovoid jars with maximum diameters around or just below the midpoint of the body.

## Group 145 $A_2$ (Pl. 77 : 1)

This minor group includes ovoid jars with maximum diameters that are around or just below the midpoint of the body. Group 145 $A_2$ has a low ring base. The neck is straight and flares outward, terminating in a horizontal rim. It is decorated with multiple horizontal grooves and/or ridges. The group is attested in northern Babylonia and the nearby Diyala Basin in the 17th century.

*COMPARANDA*

*Northern Alluvial Plain*

*Sippar (Abu Habbah)* : AL-JADIR 1987, 193, illustr. 17 : 4 (drawing) = illustration 8 : g (photo) on p. 202 ; slightly thinner body than our Pl. 77 : 1.

*Diyala Basin*

*Tell ed-Dhiba'i* : AL-GAILANI 1965, possibly Pl. 1 : 9.

*Tell Halawa* : GHASSAN 1995, Pl. 88 : 208-214 ; necks decorated with deeper horizontal ridges.

## Group 145 $A_3$ (Pl. 77 : 2-3)

Group 145 $A_3$ is a minor group of ovoid jars with maximum diameters that are around or just below the midpoint of the body. Bases are convex. Necks are straight and slightly flaring, bearing multiple horizontal grooves. The necks spring directly from the body, without a significant shoulder, though Plate 77 : 3 has a very narrow ledge shoulder. They terminate in a horizontal rim.

In northern Babylonia the group is represented by vessels from the neighboring sites of Tell ed-Dēr and Sippar (Abu Habbah), which date to the 17th century, the era of Hammurabi and Samsuiluna. The group is attested in southern Babylonia, as well.

Like the vessels of Group 140 C above, these also resemble the so-called funerary jars of Bahrain, which can be dated to the

198 Plate 76 : 7 comes from Gruft I in Nordost-Abschnitt I of Isin, a context that is likely to belong to the 17th century.

199 AL-GAILANI 1965, Pl. 1 : 9.

200 See also MÉRY *et al.* 1998 for a discussion of the technical characteristics of this distinctive class pottery from Bahrain, as well as for the identification of possible imports from Bahrain found at Larsa.

201 This example is also presented in *ib.*, 166-169, where it is given the field number 25.569.

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early 2nd millennium NLC (LOWE 1986 ; POTTS 1990, 210-213 ; and LOMBARD [ed.] 1999, 56-57 and 62). They lack the deep red color of the Bahraini examples, so they may be imitations made of local clay.

*COMPARANDA*

*Southern Alluvial Plain*

*Tell al-Wilaya* : TARIQ MADHLUM 1960, fig. 3 : 5 ; same body as our Pl. 77 : 2-3 but only one groove below the rim.

*Gulf*

*Barbar (Bahrain)* : ANDERSEN and HØJLUND 2003, possibly figs. 523-525 (sherds).

*Qala'at al-Bahrain* : LOMBARD (ed.) 1999, 62, Nos. 21-25, jar on right, profile obscured (photo).

*Tell Abraq, UAE* : POTTS 2000, 120, bottom left and right (photos) ; so-called 'Barbar tradition'.

## FAMILY 150

The family is composed of a single group of small ovoid bottles with flaring necks and simple rims. Most have been decorated with geometric designs in dark paint.

### Group 150 A 2 (Pl. 77 : 4 to Pl. 78 : 14)

Group 150 A 2 consists of small-to-medium-sized painted bottles that are highly distinctive in terms of their shape and decoration, and are very widespread. The body is ovoid, usually with a low maximum diameter, so that it has a baggy appearance (the slender shape of Pl. 77 : 6 is exceptional). The constriction at the base of the neck is marked by a small, narrow ledge in many, though not all, examples. The straight, flaring neck is of medium height. The simple rim is tapered or rounded. These bottles are usually decorated with geometric designs in dark, bituminous paint. Unpainted bottles with unfinished flat bases have been reported from a 2nd-millennium context at Shishin in the Middle Euphrates (see *Comparanda*) and from Sippar (fig. 13a). A painted example with a reshaped flat base comes from the Iraqi excavations at Tell ed-Dēr (fig. 13b).

Fig. 13. Flat-based examples of Group 150 A.
a) Sippar (Abu Habbah). Exc. Area U/106. *Sumer* 54, Pl. 51 : 3. Unpainted.
b) Tell ed-Dēr. Iraqi exc. of 1941, Area TB 2. Drawn at the IM.

Examples from northern Babylonia come from contexts dating to the 17th and 16th centuries, though the 16th-century examples are incomplete and therefore may not represent contemporary production of the shape. There are a number of 17th century examples from southern Babylonia. These bottles were found in the palace at Mari in the Middle Euphrates, where they can be dated to the early 17th century. Others come from 17th- and 16th-century levels at Ishchali in the Lower Diyala Basin. Fragmentary examples were recovered from late 17th- and early 16th-century contexts in the Upper Diyala. A small fragmentary example, unpainted, has been found at Assur in the Middle Tigris Basin. This group has thus far not been attested in the Gulf.

These bottles are diagnostic for the 17th century in northern and southern Babylonia and in northern peripheral regions. The extent to which they were still being produced in the early 16th century remains uncertain.

In controlled excavations in Susiana, a local variant of Group 150 A 2 is attested after the middle of the 16th century. The base is usually finished but flat, the neck is short and the rim is always horizontally everted.[202]

*COMPARANDA*

*Northern Alluvial Plain*

*Sippar (Abu Habbah)* : besides Pl. 77 : 6 illustrated here, see also : *Sumer* 54, Pls. **51** : 2 (unpainted) and **54** : 2.

*Southern Alluvial Plain*

*Isin* : besides Pl. 78 : 1 illustrated here, see also : *Isin* 3, Pls. **26** : 17 (IB 1377, unpainted) and **29** : 7 (IB 1636) and 9 (IB 1470).

*Nippur* : besides Pl. 78 : 2-5 illustrated here, see also : FRANKE 1978, fig. 60 : 4a, unpainted.

*Middle Euphrates*

*Shishin* : SALAH SALMAN RUMAIYDH 2009, fig. 28 : 5 = SALAH SALMAN RUMAIYDH 2010, Pl. 8 center ; flat base, unpainted but close to our Pl 77 : 9.

*Middle Tigris Basin*

*Assur* : BEUGER 2005, Katalog 2, Pl. 109 : 1 (rim and neck missing ; smaller than other examples).

*Diyala Basin*

*Tell ed-Dhiba'i* : KHALID K. HAMMOUDI 1989-90, 100, illustr. on top left.

*Tell Harmal* : ADIL NAJI 1961, Pl. 3 : 62543 (photo).

*Tell Suleimah* : GHASSAN 1995, Pl. 126 : 413 (geometric decoration) and 414 (figurative decoration).

*Susiana*

*Farukhabad* : CARTER 1981, fig. 90 : b, surface find with a flat base and a small everted beveled rim ; unpainted.

*Haft Tepe* : NEGAHBAN 1991, fig. 13 : 159-160 ; unpainted.

*Susa* : DE MECQUENEM 1943, fig. 44 : 8 and 10, with horizontally everted rims ; unpainted.
*Id*. 1953, Pl. 18 : 18, erroneously dated 1250-1100 BC.
*MDP* 47, Pl. 12 : 21-22 ; unpainted.
PONS 1991, Pls. 36 : 1 and 37 : 2, 8, 9 (= GHIRSHMAN 1964, fig. 24) and 10-23 (Louvre, Exc. de Morgan, de Mecquenem and Ghirshman). Unpainted except No. 23.

202 See *MDP* 47, Pl. 12 : 21-22. Besides the reference to GHIRSHMAN (1964, fig. 24) mentioned in the *Comparanda,* a number of these bottles were found in unpublished burials dug from A XII and, in one case, from a burial dug from either A XII (1st half of 15th c.) or A XI *ancien* (2nd half of 15th c.) ; for two examples of the latter period, see NEGAHBAN 1991, fig. 13 : 159-160.

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## FAMILY 155

This small family consists of small to medium-sized globular jars having their maximum diameters low on the body. Their necks and mouths are wide. There are two groups.

### Group 155 A 2 (Pl. 79 : 1)

Group 155 A 2 consists of jars similar to those of the following Group 155 B 2, with ring base, globular body with low maximum diameter and narrow ledge shoulder. The wide neck, which terminates in a horizontal triangular rim, is of medium height, taller than the low neck of Group 155 B 2.

This seems to be a minor northern variant of Group 155 B 2. It appears only in the Northern Alluvial Plain and can be dated to the middle decades of the 17th century.

### Group 155 B 2 (Pl. 79 : 2-5)

Group 155 B 2 is composed of jars having a ring base and a globular body with low maximum diameter. A short, wide neck springs from a narrow ledge shoulder. The triangular rim is horizontal or inwardly beveled. Plate 79 : 5, from Warka, is painted with the dark geometric designs characteristic of the 17th century in Babylonia. The profiles of this group are not too far from the profiles of contemporary vessels belonging to Group 30 A 2. Compare especially Plate 79 : 2 and 5 with Plate 44 : 4.

All examples, from both northern and southern Babylonia, belong to the 17th century. Though it is also known in the North, this appears to be a predominantly southern Babylonian group.

*COMPARANDA*

*Northern Alluvial Plain*

*Sippar (Abu Habbah)* : *Sumer* 54, Pl. 50 : 8.

*Southern Alluvial Plain*

*Nippur* : besides Pl. 79 : 3-4 illustrated here, see also : *OIP* 78, Pl. 94 : 11.

*Warka* : besides Pl. 79 : 5 illustrated here, see also : VAN ESS 1988a, fig. 6 : 65.

## FAMILY 160

This family includes ovoid to globular ring-based jars with their maximum diameters at the midpoint of the body.

### Group 160 A 2 (Pl. 79 : 6 to Pl. 80 : 2)

Group 160 A 2 represents small ring-based jars that have their maximum diameter at the midpoint of an ovoid to globular body. Some examples have a narrow ledge shoulder at the base of the neck (Pl. 79 : 7-80 : 2).[203] Necks are more-or-less vertical and terminate in outwardly thickened horizontal (Pl. 79 : 7-80 : 2) or beveled (Pl. 79 : 6) rims. Examples from northern Babylonia tend to have taller necks and slimmer profiles than their southern counterparts, which are more nearly globular.

The upper part of Plate 80 : 2 is decorated in black paint. The exterior of the rim, neck and shoulder ledge are covered with a single broad painted band. At the bottom edge of this band, suspended from the edge of the narrow ledge, is a row of small dots.

These small jars are attested in both the Northern and Southern Alluvial Plain in the 17th century.

*COMPARANDA*

*Southern Alluvial Plain*

*al-Hiba* : CARTER 1989-90, fig. 3 : 2 (different rim).

*Larsa* : CALVET 2003, fig. 69 : 59.66.

CALVET *et al*. 2003, figs. **17** : h and **26** : a (different rim).

*Nippur* : besides Pl. 80 : 1 illustrated here, see also : *OIC* 22, fig. 86 : 4.

### Group 160 B 2 (Pl. 80 : 3-5)

Group 160 B 2 is a small group of ovoid vessels with ring bases ; their maximum diameters are at the midpoint of the body. They have a vertical or slightly flaring neck with multiple horizontal ridges and an outwardly-beveled triangular rim.

A single large vessel, for which a 17th-century date is possible, though not certain, comes from Warka in the Southern Alluvial Plain (Pl. 80 : 3). The illustrated vessels from Yelkhi in the Upper Diyala Basin are from the 17th century, although there are several earlier examples from Yelkhi, as well.[204] Given that there are earlier examples in the Upper Diyala than in Babylonia, it is possible that this was not originally a Babylonian shape. Since this minor group was present in both the Diyala and southern Babylonia, its absence in northern Babylonia may be due to insufficient excavation. Vessels of similar shape are also present in the Gulf.

*COMPARANDA*

*Gulf*

*Bahrain Cemeteries* : DENTON 1994, fig. 9, close to our Pl. 80 : 3 (Warka).

*Failaka* : PIC 2008, possibly fig. 16 : 83.

## FAMILY 165

Family 165 comprises small to medium-sized globular jars. The latest examples (Pl. 83 : 1-2 and 7-9) have somewhat slimmer, more ovoid shapes. There are three groups.

### Group 165 A 2 (Pl. 80 : 6 to Pl. 83 : 9)

Group 165 A 2 represents the primary group of small and medium-sized jars through the middle centuries of the 2nd millennium, from the late 18th century to the early 14th century. The principal diagnostic characteristics of these jars are their ovoid to globular shape and simple rounded rims. Among the earlier jars in the group the maximum diameter occasionally falls below the middle of the body (Pl. 81 : 5, Pl. 82 : 4 and Pl. 83 : 6). Several of the latest examples, from the 16th-early 14th centuries, have slimmer profiles than their earlier counterparts (Pls. 82 : 1 and 83 : 1-2, 5 and 7-9). The maximum diameters of the jars from around 1400 fall just above the middle of the body.

Bases are always finished. In earlier examples they are almost always a low ring, though a low reshaped foot (Pl. 81 : 4) or a finished disk (Pl. 83 : 5) is occasionally attested. The examples from the 15th-14th centuries uniformly have a low foot, which was drawn out and shaped from the clay at the bottom of the vessel after the initial throwing (Pl. 83 : 1-2, 7 and 9). The use of this technique on jars was apparently new in the 15th century, although by the 16th century it was already the usual way to shape goblet bases in northern Babylonia (see Pl. 62).

Through the 17th century southern Babylonian jars usually have a narrow ledge shoulder, though there are exceptions (Pl. 81 : 2). Ledge shoulders are also characteristic of the jars of Susiana (Pl. 82 : 8-10). In Northern Babylonia the sharp articulation of the ledge shoulder is lacking, though hints of it occasionally appear (Pl. 82 : 2). Necks are almost always of medium height in the Northern Alluvial Plain and in the peripheral regions, while in the Southern Alluvial Plain both short and medium necks can be found. In both North and South the necks can

[203] Ledge shoulders on small and medium jars are typical in southern Babylonia. They are less common on jars in northern Babylonia.

[204] GABUTTI 2002-03, Pl. 96 : 7 and Pl. 97 : 1.

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be either everted or vertically oriented and concave. Some also lean inward. The simple rounded rims are sometimes out-turned, particularly on inward-leaning necks (Pl. 81 : 3 and 7, and Pl. 83 : 5-6).

Fig. 14. Small Late Old Babylonian jar from Harrâdum with high maximum diameter.
Harrâdum : V 164*, *Bât*. 7, Level 3A, 7.5YR 8/2, ø rim : 88. *Haradum* 1, fig. 95 : 10. Plugged base. Mark on surface not shown. Redrawn.

Southern jars of the 17th century are sometimes decorated with a dark painted band extending from the rim down to the shoulder ledge with a row of dots or vertical strokes suspended from the edge of the ledge (Pl. 81 : 1, 4 and 8).[205]

The earliest of these jars are represented by sherds from Tell ed-Dēr in the Northern Alluvial Plain. They can be dated to the end of the 18th century and the beginning of the 17th (Pl. 80 : 9-10). The group continues in northern Babylonia through at least the middle of the 16th century. All the southern examples, however, are datable to the 17th century. Plate 81 : 3, from Burial 62 at Isin, contained a tablet dated to Hammurabi, year 39.[206]

Jars of Group 165 A 2 are attested in the Middle Euphrates during the 17th century and the first half of the 16th. Figure 14 shows a small jar from Harrâdum that can be dated to the middle of the 16th century. Its maximum diameter is just above the middle of the body, and in this way its profile seems to anticipate the similar profiles of the Early Kassite jars of the late 15th/early 14th century (Pl. 83 : 1-2 and 7-9). Unlike those jars with their typically filled-in bases (Pl. 83 : 1-2), however, it still has the characteristic plugged base of the Old Babylonian Period. With its relatively high maximum body diameter, it calls to mind the Middle Euphrates goblets of the 16th century, which also have high maximum diameters (Pl. 62 : 10-11) and likewise seem to anticipate their late 15th-/early 14th-century counterparts (Pl. 99 : 2-4 and 9-11).

In the Diyala Basin the jars of Group 165 A 2 begin to appear in the late 18th century and continue into the 16th.

The jars from Failaka are somewhat larger than those from Babylonia (Pl. 82 : 7),[207] but their profiles look like those of 17th-century examples from the Southern Alluvial Plain (esp. Pl. 81 : 2)[208] as well as those of 16th-century examples from the Northern Alluvial Plain (see Pl. 83 : 5). The illustrated vessel, therefore, sits astride 1600 (Pl. 82 : 7).[209] The multiple examples of this shape on Failaka and Bahrain provide strong evidence of the connections between the Gulf and Babylonia during the Old Babylonian Period.

The globular jars from Susa (Pl. 82 : 8-10) have affinities with those of Babylonia, including globular bodies and ledge shoulders. However, the development of these jars in the 17th and 16th centuries seems to be more a local affair and does not owe much to their Babylonian counterparts.

Plate 83 : 2, from Tell ed-Dēr in the Northern Alluvial Plain, is morphologically the earliest of the latest vessels in Group 165 A 2. It was found in Burial 392 along with the morphologically earliest Kassite goblet from Babylonia (Pl. 99 : 4) and has been assigned to the mid-15th century. Plate 83 : 1 comes from a context at Tell ed-Dēr dated to around 1400. A jar from an Early Kassite context at Nippur (Pl. 83 : 7) has been placed around the same time based on the similarity of its size and shape to the two examples from Tell ed-Dēr.

A fragmentary vessel from Qala'at al-Bahrain in the Gulf (Pl. 83 : 9) is very close in shape to the those from Tell ed-Dēr and Nippur. The vessel from Bahrain is part of a pottery assemblage referred to as Period IIIb1 in its publication. The vessels of this assemblage were coated in place by bitumen that melted during a catastrophic fire. A C-14 determination for Period IIIb1 has yielded the calibrated date 1410 BC (Cal. +/− 1 stdv = 1510-1260 BC).[210] This carbon date is not decisive because its standard deviation is relatively large, yielding likely dates between 1510 and 1260, a span of time that represents most of the period of Kassite rule in Babylonia. However, we believe we can date this jar to the late 15th/early14th century on the basis of its shape. A fragmentary jar from Yelkhi (Pl. 83 : 8) also belongs in this late 15th-/early 14th-century time-frame on the basis of its shape and its stratigraphic context (Level Ic).

Jars similar to those of Early Kassite Babylonia are also attested in Western Iran at Tepe Guran.

The shapes of these Early Kassite vessels of the late 15th/early 14th century fit in the middle between the shapes of 16th-century members of Group 165 A 2 from northern Babylonia (Pl. 82 : 1-2 and Pl. 83 : 3-6) and the later jars of Groups 205 A 1 and 205 A 2 (Pls. 94-95). They provide the morphological link between the jars of the Late Old Babylonian (16th c.) and Late Kassite (13th-12th c.) Periods.

Two published jars from the Bahrain Cemeteries have plugged bases (see *Comparanda*). Plugged bases on jars like these are rarely attested in Babylonia in Early Kassite times, though they are not completely unknown.[211] However, plugged bases are common at Susa in Susiana in the 15th century.[212] It is possible that vessels with such bases entered the Gulf at this time from Susiana rather than directly from Babylonia.

*COMPARANDA*

*Northern Alluvial Plain*

*Kish*: DE GENOUILLAC 1924, Pl. II : 4 (= Pl. 60).
*Id*. 1925, probably Pl. XVIII : 2, left, shown next to a Kassite goblet.
LANGDON 1924, Pl. 32 : 2 erroneously dated 'Early Period'.

*Sippar (Abu Habbah)* : AL-JADIR 1987, 193, illustr. 18 : 8.
AL-JADIR 1989-90, 87, illustr. 6 : 5. >

205 The same decoration appears on a southern example in Group 160 A 2 (Pl. 80 : 2).

206 The tablet bears the excavation No. IB 899 (*Isin* II, 95 *sub D 10* ; for Burial 62, see p. 44).

207 See also HØJLUND 1987, 71-72, figs. 264-268.

208 See also HØJLUND 1987, 158.

209 This is somewhat earlier than the broadly 16th-century NLC date for Failaka Period 3A, in which this jar is placed by HØJLUND (1987, fig. 265, and pp. 109 and 159).

210 HØJLUND and ANDERSEN 1994, 174, Sample No. K-827 ; and HØJLUND and ANDERSEN 1997, 61.

211 An unpublished jar from an Early Kassite context at Nippur has a plugged base that fell out, leaving a hole (Lot no. B403 from WA IVC).

212 *MDP* 47, Pl. 21 : 8-12.

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*BaM* 36, Pls. **22** : 2797, 2825 and 2856, **24** : 2792, and possibly **25** : 233.
*Sumer* 54, Pl. 49 : 3-4 ; see also 5 with a possible flat base (165 A 1 ?).

*Tell ed-Dēr* : besides the vessels illustrated here on Pls. 80, 82 and 83, see also :
*MHEM* 1, Pl. 36 : 2, 7 and probably 5 and 9.
*NAPR* 6, Pl. 14 : 3 to 10.

*Tell ed-Deylam (Dilbat)*: besides Pl. 83 : 5-6 illustrated here, see also : ARMSTRONG 2001, fig. 10 : b.

*Southern Alluvial Plain*

*Isin* : besides Pl. 81 : 2-3 illustrated here, see also :
*Isin* 3, Pls. **26** : 6 (neck similar to our Pl. 80 : 8) and **29** : 2 and 4.

*Larsa* : CALVET *et al*. 2003, fig. 18 : b, c (rim like those of 165 B 2) and d.

*Nippur* : besides Pl. 81 : 1 and 4 illustrated here, see also :
FRANKE 1978, fig. 60 : 2.
*OIP* 78, Pl. 90 : 13.
*OIP* 97, Pl. 50 : 7.
*OIP* 111, Pls. **81** : i and probably f, **85** : a.
*OIP* 129, Pl. 168 : 4.

*Warka* : besides Pl. 81 : 5-6 and 8 illustrated here, see also :
*AUWE* 10, Pl. 28 : g.

*Middle Euphrates*

*Tell al-Zawiyah :* NADIR AL-RAWI 1979, fig. 25, top right (photo).
*Tell al-'Usiyeh* : AGHA 1987-88, 139, fig. 36 : 37.

*Diyala Basin*

*Tell ed-Dhiba'i* : AL-GAILANI 1965, Pl. 1 : 7.
*Tell Muhammad* : AMEL METAB 1989-90, 150, illustr. 8 : 2 (close to our Pl. 83 : 2) and 4.

*Gulf*

*Bahrain Cemeteries* : DENTON 1994, fig. 6 ; the two upper jars have plugged bases.
*Id*. 1999, fig. 4.

*Failaka* : besides Pl. 82 : 7 illustrated here, see also :
HØJLUND 1987, 71-75, figs. 264, 266-268, and probably 277.

*Qala'at al-Bahrain* : besides Pl. 83 : 9 illustrated here, see also :
HØJLUND and ANDERSEN 1994, figs. 254 (with a less spherical body but with a rim similar to our Pl. 81 : 7) and 537 ; fig. 740 could be Early Kassite.
HØJLUND and ANDERSEN 1997, figs. 198 and 200 ; fig. 196 could belong to a smaller jar.

*Western Iran*

*Tepe Guran* : THRANE 2001, Pls. 31 : 2, 3 and 5 = PONS and GASCHE 2006, resp. fig. 5 : 3, 4 and 2.

## Group 165 B 2 (Pl. 84 : 1-8)

Group 165 B 2 consists of globular jars with ring bases ; vertical and concave (Pl. 84 : 1 and 5-7), everted (Pl. 84 : 8) or inward-leaning (Pl. 84 : 2-4) necks ; and rims that are outwardly beveled (Pl. 84 : 1-4 and 6-7) or horizontal (Pl. 84 : 5 and 8). These vessels lack articulated shoulders, although there is sometimes a groove at the base of the neck (Pl. 84 : 2-3 and 7). The rim and neck of Plate 84 : 7 are painted in dark paint with short strokes or teardrops suspended around the shoulder.

This group is attested in northern Babylonia in the late 17th and 16th centuries and in southern Babylonia in the middle of the 17th century.

*COMPARANDA*

*Northern Alluvial Plain*

*Sippar (Abu Habbah)* : *Sumer* 54, Pls. 50 : 1 ; same rim as our Pl. 84 : 6 but a less globular body.

*Southern Alluvial Plain*

*Larsa* : besides Pl. 84 : 8 illustrated here, see also :
BACHELOT and CASTEL 1989, fig. 23 : 7 (base missing, otherwise close to our Pl. 84 : 7).
CALVET 2003, fig. 67 : 59.92 (neck and rim).

*Warka* : VAN ESS 1991a, 93, Pl. 105 : 7 (similar to our Pl. 84 : 7; we disagree with the earlier dating of this shape).

## Group 165 C 3 (Pl. 84 : 9)

Group 165 C 3 is a small group consisting of globular jars with convex bases and short concave necks. The horizontal rim is outwardly thickened and triangular in section. The best preserved example is illustrated.

This group is only found in northern Babylonia during the 16th century.

# FAMILY 170

Family 170 is made up of globular-to-ovoid vessels with everted necks and simple rims. The bodies of these vessels are generally small. Over time, however, the necks tend to become longer. We refer to these vessels as cups.

## Group 170 A 1 (Pl. 85 : 1-12)

Group 170 A 1 includes globular cups with unfinished flat or short stump bases. They have short, sharply everted necks and wide mouths. The simple rims are tapered or rounded.

The group is attested in the Northern Alluvial Plain in the late 18th century and again in the late 17th century. A unique example with a body shape that is very close to Pl. 85 : 3 (Nippur) but with a well-done ring base was found in an early 18th century level at Tell ed-Dēr ;[213] this cup could be the early (original ?) version of Group 170 A. In southern Babylonia a number of examples have been found in mid-17th-century contexts. Vessels with a similar shape are also present in the Gulf. At Harrâdum in the Middle Euphrates they date to the 17th and the early 16th centuries. Diyala Basin examples are also attested between the mid-17th and the early 16th centuries.[214] Group 170 A 1 definitely continues later in the peripheral regions of the Middle Euphrates and the Diyala Basin than it does in the Babylonian heartland. Within Babylonia proper the cups of Group 170 A 1 evolve into Groups 170 B 1, 170 C 1 and 170 D 2 as their necks grow taller.

*COMPARANDA*

*Northern Alluvial Plain*

*Kish* : DE GENOUILLAC 1924, Pl. 111 : 4.
*Id*. 1925, Pl. XVIII : 1, top, second from left.

*Southern Alluvial Plain*

*Fara :* MARTIN 1988, fig. 41 : 14.

*Larsa* : CALVET 2003, fig. 54 : 27.24.
CALVET *et al*. 2003, fig. 15 : a, c, d and j.

*Nippur* : besides Pl. 85 : 3-4 and 6-7 illustrated here, see also :
FRANKE 1978, fig. 60 : 1.
*OIP* 78, Pl. 94 : 5.

*Warka* : VAN ESS 1991a, 96, Pl. 109 : 48b.

*Middle Euphrates*

*Tell al-'Usiyeh* : AGHA 1987-88, 139, fig. 36 : 27 and 30 (fig. 36 : 28-29 are more elongated piriform shapes).
FUJII *et al*., 1984-85, figs. **19** : 1 (= OGUCHI, K. & H. 2006, fig. 14 : f) and **19** : 2 (see fig. 22 : 2 for photo) = NUMOTO and OKADA 1987, fig. 91 : 1-2.
OGUCHI, K. & H. 2006, fig. 14 : f.

*Diyala Basin*

*Ahmed al-Mughir* : ARMSTRONG 1981, Pl. 112 : 29.

*Tell Asmar* : *OIP* 63, possibly Pl. 151 : B.176.200*a* (body is less globular).

*Tell ed-Dhiba'i* : MOHAMMAD ALI MUSTAFA 1949, Pl. V : 25.

*Tell Muhammad* : AMEL METAB 1989-90, 150, fig. 8 : 13.

*Tell Taban* : NUMOTO 2008, fig. 7 : 4. >

213 Cf. *TD* 4, Pl. 19 : 7 (102376), Sounding A, Phase IIa, height : 60 mm, ø rim : 75 mm, ø body : 80 mm.

214 Vessels with a similar shape also appear at Susa, but they are generally larger and consistently have narrow ledge-shoulders, which never appear on the Babylonian forms (*MDP* 47, Pl. 22 : 4, 6, 15, 17, 24, 27).

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*Gulf*

*Bahrain Cemeteries* : DENTON 1999, probably fig. 18 with more spherical body, similar to our Pl. 85 : 1.
*Failaka* : PIC 2008, probably fig. 17 : 100.

## Group 170 B 1 (Pl. 85 : 13-19)

Group 170 B 1 includes globular vessels with unfinished flat or stump bases and moderately flaring necks of medium height. The simple rims are tapered. Only unfinished bases are attested in Babylonia.[215] The vessels in this group are similar to those of Group 170 A 1, except that their necks are longer. The neck of Plate 85 : 16 is at the limit between the two groups.

Group 170 B 1 is attested in northern Babylonia during the 17th and 16th centuries. This group is common in the North. A single possible example has been identified in southern Babylonia (see *Comparanda*), where otherwise only the low-necked variant (Group 170 A 1) was produced.

Group 170 B 1 first appeared in the Upper Diyala in the late 18th century, earlier than in northern Babylonia, and continued to be produced into the 16th century (see *Comparanda*).

During the 16th century, the necks of the medium-necked Group 170 B 1 tended to become taller than before (Pl. 85 : 13-14). Group 170 C 1, representing the further lengthening of these necks, appeared in the 16th century. A distinct, fine-ware tall-necked variant began to be produced in the 17th century (Group 170 D 2), and its neck grew higher still in the 16th century. These variants are described next.

*COMPARANDA*

*Northern Alluvial Plain*

*Kish* : DE GENOUILLAC 1924, Pl. XX : 6 (photo) and Pls. **49** : 114 and **61** : 114 (drawings of the same vessel) ; Pl. III : 8 (photo) and Pls. **51** : 125 and **54** : 125 (drawings of the same vessel) ; see also Pl. 63 : 12 for a small vessel close to our Pl. 85 : 15.
DE GENOUILLAC 1925, Pl. XX : 1 = Pl. 56 : 9.
*Sippar (Abu Habbah)* : *BaM* 36, Pl. 23 : 107.
*Sumer* 54, Pls. **47** : 10-12 (neck/rim sherds) and **50** : 7 and 11.
*Tell ed-Dēr* : besides the vessels illustrated on Pl. 85, see also : *TD* 1, Pl. 19 : 4-7 and 9.
*TD* 2, Pl. 21 : 3.
*MHEM* 1, probably Pl. 35 : 3 and 4.

*Southern Alluvial Plain*

*Larsa* : CALVET 2003, possibly fig. 54 : 27.41.

*Diyala Basin*

*Khafajah* : *OIP* 63, Pl. 160 : B.556.720 (small ring base).
*Tell Asmar* : *OIP* 63, Pl. 151 : B.175.720.
*Tell ed-Dhiba'i* : KHALID K. HAMMOUDI, 1989-90, illustr. on top of p. 97.
*Tell Muhammad* : AMEL METAB 1989-90, 150, fig. 8 : 3 and 6.
*Tell Yelkhi* : GABUTTI 2002-03, Pl. 67 : 2 and 5.

*Gulf*

*Bahrain Cemeteries* : possibly DENTON 1999, fig. 15.
*Failaka* : HØJLUND 1987, possibly fig. 283.

## Group 170 C 1 (Pl. 86 : 1-3)

This group consists of vessels with more-or-less globular bodies and unfinished stump bases or string-cut bases. Tall necks are vertical or moderately flaring with simple rims that are tapered or rounded.

Group 170 C 1 is attested in the Northern Alluvial Plain in the middle decades of the 16th century and at about the same time in the Diyala Basin, if not a little earlier. In Babylonia this group is contemporary with the later tall-necked cups in fine ware, which have the tallest necks in that group (Group 170 D 2, Pl. 67 : 4-10).

[215] An otherwise comparable cup from the Diyala Basin has a ring base (see *Comparanda* under Khafajah)

We have included Plate 86 : 3, from Yelkhi in the Upper Diyala, with some hesitation. It has a somewhat higher maximum body diameter and more tapered lower body than do the northern Babylonian examples (Pl. 86 : 1-2). We have included more than a few examples from other Diyala sites in the *Comparanda*, which show the regional variation displayed by this shape. However, we do not completely understand the relationship between the Diyala and the northern Babylonian shapes.

*COMPARANDA*

*Northern Alluvial Plain*

*Tell ed-Dēr* : besides the vessels illustrated on Pl. 86, see also : *MHEM* 1, Pl. 35 : 7.

*Diyala Basin*

*Tell as-Sib* : HAAZIM MUHAMMAD AL-NAJAFII 1987-88, illustr. on p. 71, lower row ; other examples on pp. 89 and 95.
*Tell ed-Dhiba'i* : MOHAMMAD ALI MUSTAFA 1949, Pl. IV : 6 and 8. MUHAMMAD M. SHAKIR *et al.* 1984, illustr. on p. 61, top.
*Tell Muhammad* : AMEL METAB 1989-90, 150, illustr. 8 : 8.
*Tell Yelkhi* : besides Pl. 86 : 3 illustrated here, see also : GABUTTI 2002-03, Pl. 70 : 14-16.

## Group 170 D 2 (Pl. 86 : 4-14)

The cups of Group 170 D 2 are thin-walled, well-finished vessels made of fine clay. Their bodies are globular or ovoid, with low ring bases and tall, vertical to moderately flaring necks. Their rims are tapered. A few 16th-century examples are significantly smaller (Pl. 86 : 7) or larger (Pl. 86 : 5 and 8-9) than is the norm for the group as a whole. The well-made forms of the 17th century become even more elegant in the 16th century. Their walls become thinner and the already tall necks of the 17th century (Pl. 86 : 11-13) become proportionally taller on some examples (Pl. 86 : 4, 6-7 and 10). These vessels represent a fine-ware variant of the contemporary shapes in the plain-ware Groups 70 B 1 and 70 C 1. They exhibit a gracefulness of form and delicacy in manufacture that is exceptional in the Old Babylonian assemblage.

These cups are well-attested in the Northern Alluvial Plain from the latter half of the 17th century through the 16th. This is overwhelmingly a northern group, though a single incomplete example of a well-made cup from 17th-century Nippur (Pl. 86 : 14) belongs here, as well.[216] One sees in the lone Nippur example an attempt to make a fine-ware vessel, something uncommon in the southern Babylonian pottery of the 17th century (Old Babylonian Period). The walls are suitably thin, but the base is thick and less finely made than the bases of the northern Babylonian vessels.

This group is also attested in the Middle Euphrates (probably) and in the Lower Diyala Basin.

The next identifiable step in the morphological development of the cups of Family 170 can be dated to the late 15th and 14th centuries and is represented in Group 210 A 2 (Pl. 96 : 1-9).

*COMPARANDA*

*Northern Alluvial Plain*

*Tell ed-Dēr* : besides the vessels illustrated on Pl. 86, see also : *MHEM* 1, Pl. 35 : 8-11 and 13-15.

*Middle Euphrates*

*Terqa* : TASSIGNON 1997, probably fig. 42 : 18-19.

*Diyala Basin*

*Tell ed-Dhiba'i* : MOHAMMAD ALI MUSTAFA 1949, Pl. IV : 10. >

[216] This rimless vessel has already been published in FRANKE 1978, fig. 70 : 3. It comes from a large pit in Level III of Area WB, which is dated to the 14th century. However, the excavator has reported that during the excavation of this pit some material belonging to the 17th-century Old Babylonian house beneath may have been collected as well (*ib*., 65 and 80-81). We judge this to be a 17th-century form, either from the Old Babylonian house itself or a stray in the later pit, and have included it here.

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MUHAMMAD M. SHAKIR *et al*. 1984, illustr. on p. 65, left and center right. Fine ware but shorter neck.
*Tell Muhammad* : AMEL METAB 1989-90, 150, illustr. 8 : 5.

## FAMILY 175

This family consists of one group of small globular or horizontally ovoid bottles.

### Group 175 $A_2$ (Pl. 87 : 1-10)

This group includes small bottles generally having a globular or horizontally ovoid shape. All examples have low, well-made ring bases. The maximum diameter is at or below the middle of the body. Until around 1600 the shoulders of most of these bottles are marked with a tiny ledge at the base of the neck (Pl. 87 : 4-8 and 10). Thereafter, this tiny ledge is lacking. Necks are either vertical or everted, sometimes sharply (Pl. 87 : 2 and 8-9). Rims are thickened and are either horizontal or outwardly beveled. Plate 87 : 4 seems to be a well-made miniature.

In northern Babylonia these bottles are found in the 17th and 16th centuries ; in the South only the 17th century is represented.

*COMPARANDA*

*Northern Alluvial Plain*

*Sippar (Abu Habbah)* : *Sumer* 54, Pl. 50 : 9 ; complete bottle with a simple tapered rim and a flat base (175 $A_1$ ?).

*Southern Alluvial Plain*

*Nippur* : besides Pl. 87 : 9 illustrated here, see also : *OIP* 78, Pl. 95 : 2.

## FAMILY 180

This family consists of one group of small, squat vessels that were used as lamps.

### Group 180 $A_2$ (Pl. 87 : 11-13)

These small, squat vessels, globular to piriform in shape, have been identified as oil lamps because of traces of soot inside, over the rim and down the outside. In addition, the interior and exterior surfaces have flaked off from prolonged exposure to fire, and some of the rims have completely disintegrated.[217] The base is a low ring and there is no neck. Where present, the rim is no more than the thinned and rounded top of the body around the narrow opening.

These lamps have been recovered at Tell ed-Dēr in northern Babylonia. They date to the 16th century.

*COMPARANDA*

*Northern Alluvial Plain*

*Kish* : probably DE GENOUILLAC 1925, Pl. 55 : 10, 11 or 12.

## FAMILY 185

Family 185 includes a single group of bottles with ovoid bodies and convex bases.

### Group 185 $A_3$ (Pl. 88 : 1-29)

This group of small bottles has convex bases. Their horizontally oriented ovoid bodies are characterized by a near carination at the point of maximum diameter. Except in the Diyala Basin, this near carination is absent among the latest examples (Pl. 88 : 1-2 and 23-25), as the bodies become more nearly spherical. The necks are most often concave with flaring rims that are usually rounded, sometimes thickened and shaped.

217 GASCHE 1989, 90.

In the Northern Alluvial Plain these bottles extend from the 20th to the 16th century (Ur III through Late Old Babylonian Periods). They are well attested in the South during the 20th century, but are less frequent thereafter ; the illustrated example from Warka (Pl. 88 : 9) may date to the 17th century. This group is attested in the Middle Euphrates in the late 17th century. There is a long sequence of ovoid bottles in the Diyala extending from the 19th century to the 16th. At Susa angular ovoid examples have been found in 20th and 19th century contexts, then more globular forms occur between the 17th and 15th centuries. This group has also been found in the Middle Tigris Basin and in the Southern Zagros Piedmont.

*COMPARANDA*

*Northern Alluvial Plain*

*Tell ed-Dēr* : besides Pl. 88 : 1-8 illustrated here, see also : *TD* 4, Pl. 11 : 4.
*Sippar (Abu Habbah)* : *Sumer* 54, Pls. 50 : 10.

*Southern Alluvial Plain*

*Bismaya* ; WILSON 2012, Pl. 16 : b ; body close to our Pl. 88 : 11 but simple everted rim.
*Nippur* : besides Pl. 88 : 10, 13-14 and 16 illustrated here, see also :
*OIP* 78, Pl. 83 : 15.
*OIP* 129, Pl. 114 : 6.
*Tell al-Wilaya* : TARIQ MADHLUM 1960, fig. 3 : 11.
*Telloh* : DE GENOUILLAC 1936, Pl. XXXI : 3690; see also Pl. XXXII : 2543.
*Ur* : WOOLLEY 1934, type 53.
WOOLLEY and MALLOWAN 1976, type 65.

*Middle Euphrates*

*Tell al-'Usiyeh* : AGHA 1987-88, 139, fig. 36 : 10.

*Middle Tigris Basin*

*Assur* : BEUGER 2005, Katalog 1, Pl. 20 : 2 and 12.
*Tepe Gawra* : SPEISER 1935, Pls. **69** : 125 (probably Akkadian-Early Ur III) and **71** : 154 (probably Ur III).
*Tell Billa* : possibly SPEISER 1933, Pls. **53** : 4 and **58** : 8.

*Diyala Basin*

*Tell ed- Dhiba'i* : AL-GAILANI 1965, Pl. 1 : 14.
MOHAMMAD ALI MUSTAFA 1949, Pl. V : 23, 24 and 27.
MUHAMMAD M. SHAKIR *et al*. 1984, illustr. on p. 64, center, left (spherical body).
*Tell Genj* : WILSON-BRIGGS *et al*. 1984, Pl. 9 : 3 = GHASSAN 1995, Pl. 117 : 362.
*Tell Halawa* : GHASSAN 1995, Pls. **64** and **65**.
*Tell Harmal* : ADIL NAJI 1961, Pl. 3 : 6255 (photo).

*Susiana*

*Haft Tepe* : NEGAHBAN 1991, fig. 13 : 161.
*Susa* : besides Pl. 88 : 23-29 illustrated here, see also *:* DE MECQUENEM 1943, fig. 70 : 18.
*MDP* 47, Pls. **13** : 6, 10 and **14** : 3, 6-7.
PONS 1991, Pl. 32 : 13 (Louvre, *fonds ancien*).

*Southern Zagros Piedmont*

*Tell Abu Sheeja* : AYAD MOHAMMAD HUSSEIN *et al*. 2010, fig. 40 : a.

## FAMILY 190

This family is made up of three groups of small globular or ovoid bottles that have convex or pointed bases.

### Group 190 $A_3$ (Pl. 89 : 1-11)

Group 190 $A_3$ includes small globular bottles with convex bases. Necks are straight and slightly flaring or concave. Rims are tapered, rounded or thickened. The thickened rims can be horizontal (Pl. 89 : 5) or beveled inward (Pl. 89 : 7 and 9). These bottles are sometimes covered in red paint and then decorated with designs in white (e.g., Pl. 89 : 6). In many cases only traces of the white-painted design remain. Some, if not all, of the bottles are handmade. Plate 89 : 1 is one of several bottles from Babylon that were made of two pieces that were joined together.

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The globular body was shaped by hand with a hole at the top. A flat ring or loop of clay was then attached around the hole to form the neck and rim.[218] We do not know if the bottles from other sites were made in the same way, but we think that it is likely that they were.

These bottles were produced beginning around 1200 and down to at least sometime in the 11th century. The earliest well-dated examples come from the Upper Diyala Basin, in contexts dating to around or shortly after 1200.[219] In the Southern Alluvial Plain there are bottles from Warka and Isin, dating to the 12th century and into the 11th. They were also found during the German excavations at Babylon in northern Babylonia.[220] The ones from Babylon can be assigned to the 12th or 11th century based on comparisons with the Diyala and Isin material. We have dated the latest context for these bottles, the burials at the surface of *Nordabschnitt* II at Isin, conservatively to around 1100, but it may extend later.[221] Due to the inadequate excavation and recording of relevant contexts elsewhere in Babylonia we do not know how late these and the other 12th-/11th-century pottery groups extend. There are no securely datable 11th or 10th century archaeological contexts to help us understand the range of the ceramics from the very end of the 2nd millennium.

*COMPARANDA*

*Northern Alluvial Plain*

*Babylon* : REUTHER 1926, 14, fig. 9 : d.

*Southern Alluvial Plain*

*Isin* : besides Pl. 89 : 2-6 illustrated her, see also : *Isin* 2, Pls. **34** : IB 789c and **35** : IB 1162a, center.

*Warka* : besides Pl. 89 : 7 illustrated here, see also : BOEHMER 1988, 467, Pl. 15 : 22 (rim missing).

*Diyala Basin*

*Tell Kesaran* : VALTZ 1985, 69, middle row, third from left (base pushed in).

*Tell Zubeidi* : besides Pl. 89 : 9 and 11 illustrated here, see also : BOEHMER and DÄMMER 1985, Pls. **132** : 438 (drawing) and **136** : 438 (photo).

## Group 190 $B_3$ (Pl. 89 : 12-14)

Group 190 $B_3$ includes vertically oriented ovoid bottles with convex bases, a variant of Group 190 $A_3$. Necks are straight and flaring or concave. Plate 89 : 12 is covered in green glaze, a rare example of a glazed ceramic vessel from 2nd-millennium southern, as opposed to northern, Mesopotamia.

Group 190 $B_3$ has been identified in the Southern Alluvial Plain at around 1100 and in the Upper Diyala in the 12th century.[222] As with Group 190 $A_3$, insufficient excavation almost certainly accounts for the limited attestation of this group.

## Group 190 $C_{3\&4}$ (Pl. 89 : 15-19)

Group 190 $C_{3\&4}$ includes inverted piriform bottles with convex bases or nipple bases (Pl. 89 : 15 and 17). The maximum body diameter is above the midpoint. The necks are narrow and concave ; rims are rounded (Pl. 89 : 19).

This group is found at Tell ed-Dēr in northern Babylonia around 1300. The group is also attested in the Southern Alluvial Plain (see *Comparanda*). In the Upper Diyala it dates to the 14th century. The same shape is also attested significantly earlier, in 15th-century Susiana. We have included the examples from Susa even though their relationship to the ones from Babylonia is not clear. The scarcity of attestations and the long span of time involved makes it impossible to do more than present the limited evidence available for this group.

*COMPARANDA*

*Northern Alluvial Plain*

*Sippar (Abu Habbah)* : *BaM* 36, Pl. 23 : 2811.

*Southern Alluvial Plain*

*Warka* : *AUWE* 10, Pl. 38, *Grab* 66c.

*Susiana*

*Haft Tepe* : NEGAHBAN 1991, fig. 1 : 3-5.

## FAMILY 195

Family 195 is made up of small, ovoid vessels having a variety of small bases, including disk-shaped feet, unfinished flat bases and nipple bases. The necks flare outward ; the rims are tapered or rounded.

## Group 195 $A_2$ (Pl. 90 : 1-7)

Group 195 $A_2$ represents small, slender ovoid jars with disk-shaped feet or small ring bases. The maximum diameter is generally around the midpoint of the body. The lower body is rounded, not tapered, down to the foot. The disk-shaped foot usually has a tiny reshaped ring, though the foot on some examples appears to have been finished flat, based on published drawings (Pl. 90 : 1 and 3-4). The neck flares outward and terminates in a rounded or tapered rim.

The earliest examples of this group come from the Upper Diyala Basin where they can be dated to the beginning of the 12th century (Pl. 90 : 5-7).[223] Examples dating to around 1100 have been recovered at Isin in southern Babylonia (Pl. 90 : 2-4).

The group has been attested at Warka (see *Comparanda*). These jars were also found at Babylon during the German excavations at the beginning of the 20th century AD, attesting to the presence of Group 195 $A_2$ in northern Babylonia.[224] One of these is illustrated here (Pl. 90 : 1). They were discovered in burials together with globular bottles belonging to Group 190 $A_3$. Both these small jars and the bottles of Group 190 $A_3$ at Babylon can be assigned to the 12th or early 11th century on the basis of comparisons with the Diyala and Isin material already mentioned here, as well as above in Group 190 $A_3$.

The jars in this group are best understood as variants of the 12th-/11th-century jars in Group 205 $A_2$ (Pl. 95 : 1-4 and 12). Plate 94 : 3 (Group 205 $A_1$) and Plate 94 : 9 (Group 205 $A_2$), both from the middle decades of the 13th century, show the morphological link between the earlier small jars of Group 205 A and those of Group 195 $A_2$. In terms of their shape the 13th-century examples from Group 205 A are about halfway to the jars of Group 195 $A_2$, though they still have a high maximum diameter and a slightly tapered, as opposed to a fully rounded, lower body, both characteristics of Group 205 A.

As was explained above in the description of Group 190 $A_3$, we do not know how late these and the other pottery groups of

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218 We want to thank K. Sternitzke of Ludwig-Maximillians Universiteit, Munich, for sharing the information about the manufacture of the bottles from Babylon with us.

219 Regarding Groups 190 $A_3$, 190 $B_3$, 195 $A_2$, 195 $B_2$ and 195 $B_4$ : we believe that these and other early-to-mid-12th-century vessels from Diyala sites represent the expansion of the Babylonian ceramic tradition into the Upper Diyala Basin during Late Kassite times. Until now, however, examples of this group have not been excavated or dated securely at sites in Babylonia proper, so the layout of our plates seems to suggest that these shapes originated in the Upper Diyala and spread from there into Babylonia. We do not believe this to be the case. The pottery spread in the opposite direction, from Babylonia into the Diyala.

220 REUTHER 1926, 14, fig. 9*l* ; and Pl. 58 : 34 l and 49 b.

221 We thank K. Kaniuth of the University of Munich for discussing the dating of *Nordabschnitt* II at Isin with us.

222 See fn. 219.

223 See fn. 219.

224 REUTHER 1926, 14, fig. 9*l* ; and Pl. 58 : 34 l and 49 b.

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the 12th and 11th centuries extend due to the lack of excavation and the inadequate recording of pertinent contexts.

*COMPARANDA*

*Southern Alluvial Plain*

*Warka* : *AUWE* 10, Pl. 44 : *Grab* 79 (photo).

*Diyala Basin*

*Ajamat* : besides Pl. 89 : 7 illustrated here, see also : ARMSTRONG 1981, Pl. 116 : 8.

*Tell Kesaran* : VALTZ 1985, 69, top row, middle (nipple base).

## Groups 195 B 1 (Pl. 90 : 8), 195 B 2 (Pl. 90 : 9-11) and 195 B 4 (Pl. 90 : 12-16)

These three groups are characterized by a slender sinuous profile and a very small foot, either unfinished (Group 195 B 1 [Pl. 90 : 8]), finished as with a disk with or without a tiny ring (Group 195 B 2 [Pl. 90 : 9-11]), or, most commonly, finished as a nipple or knob (Group 195 B 4 [Pl. 90 : 12-16]). Among the vessels of all three groups the necks are everted and the rims are tapered or rounded, making them suitable for drinking, and the bodies are slender enough to be grasped in the hand. We refer to them as sinuous-sided cups. In comparison to the preceding Group 195 A 2 the vessels of these three groups have even slimmer profiles.

The earliest attested cup in these groups comes from the Upper Diyala and dates to around 1200 (Pl. 90 : 16) ; it has shorter, wider proportions than the later examples. The groups continue to be attested in the Diyala during the 12th century.[225] Isin in the Southern Alluvial Plain has yielded cups that can be dated to the 12th or early 11th century. This shape is also known at Nippur, where a single example was recovered from a context that almost certainly postdates the reign of Nebuchadnezzar I, and so has been dated to the 11th century.[226] An example from Babylon, published only as a photograph,[227] is probably from the 12th or 11th century. The paucity of examples from Babylonia proper is due to insufficient excavation of 12th- and 11th-century contexts. As is the case with the contemporary small bottles of Group 190 A 3 and the small ovoid jars of Group 195 A 2, these cups were undoubtedly Babylonian in origin. Similar vessels, though with a different rim, from the Habur Basin can also be dated to the 12th-11th century.

*COMPARANDA*

*Southern Alluvial Plain*

*Tell Laham* : FUAD SAFAR 1949, Pl. IV : 9 and 11.

*Ur* : WOOLLEY 1934, type 54.
WOOLLEY 1965, type 53.

*Habur Basin*

*Tell Barri* : ANASTASIO 1998, fig. 18 : 4-5 ; different rim, 12th-11th c.

*Diyala Basin*

*Tell Imlihiye* : BOEHMER and DÄMMER 1985, Pl. 51 : 249-250 ; restored shapes.

## Group 195 C 4 (Pl. 90 : 17)

Group 195 C 4 has the tall, slender profile of the other groups in Family 195. However, the lower body tapers down to a nipple base, and the neck flares outward from the shoulder. The rim is tapered. The group is attested in a 12th-century context at Isin in southern Babylonia. We believe that it is a variant of Group 195 B.

225 See fn. 219.

226 ARMSTRONG 1989, 195-196.

227 KOLDEWEY 1990, 241, fig. 164, middle.

# FAMILY 200

This family consists of three groups of small jars or bottles with either inverted piriform or ovoid bodies.

## Group 200 A 1 (Pl. 91 : 1 to Pl. 92 : 24)

Group 200 A 1 is made up of small jars or bottles that span the first half of the 2nd millennium. The typical shape of these vessels changes over time. An angular profile with a sharply set off shoulder at the point of maximum diameter becomes less angular and more ovoid, having its maximum diameter at the midpoint of the body. Except at the very beginning and very end of the sequence, both profiles exist side-by-side. The bases are string cut and unfinished ; they are generally flat, but, particularly on smaller, later examples, they can be narrow, solid stumps (Pl. 91 : 2 and 10, and Pl. 92 : 2-3, 6-7, 10 and 12). Shoulders are sometimes decorated with parallel horizontal grooves. Necks can be vertical, straight and flaring or concave. Rims can be rounded or outwardly thickened ; thickened rims are variously horizontal or outwardly beveled.

These vessels are found in the Southern Alluvial Plain in the 20th century and continue until the 17th. They are seen in northern Babylonia for the first time only in the early 18th century. They take root, are further elaborated (see Groups 200 A 2 and 200 A 3) and continue to be produced until the 16th century. They are also present in the Middle Euphrates. In the Diyala they first appear around the middle of the 18th century, shortly after their appearance in northern Babylonia, and continue to be attested into the early 16th century. They are found in Susiana from the early 17th century until around the middle of the 15th (Susa A XII, not illustrated)[228] and in the Southern Zagros Piedmont.

*COMPARANDA*

*Northern Alluvial Plain*

*Sippar (Abu Habbah)* : AL-JADIR 1987, 193, illustr. 18 : 6 ; lower shoulder than on our Pl. 108 : 1.

*Southern Alluvial Plain*

*Isin* : *Isin* 3, Pl. 26 : 3 (IB 1438).

*Nippur* : besides the small jars or bottles illustrated here on Pls. 91 and 92, see also : *OIP* 78, Pls. **94** : 15 and 17 ; and **95** : 3.

*Telloh* : DE GENOUILLAC 1936, Pl. XXXI : 3621.

*Middle Euphrates*

*Shishin* : SALAH SALMAN RUMAIYDH 2009, fig. 28 : 9 = SALAH SALMAN RUMAIYDH 2010, Pl. 8 lower left.

*Tell al-'Usiyeh* : AGHA 1987-88, 139, fig. 36 : 1-2.

*Diyala Basin*

*Tell ed-Dhiba'i* : MOHAMMAD ALI MUSTAFA, 1949, Pl. IV : 12.

*Susiana*

*Susa* : besides Pl. 92 : 19-24 illustrated here, see also : *MDP* 47, Pl. 12 : 2.

*Southern Zagros Piedmont*

*Tell Abu Sheeja* : AYAD MOHAMMAD HUSSEIN *et al*. 2010, figs. 41 and 47.

## Groups 200 A 2 (Pl. 93 : 1-7) and 200 A 3 (Pl. 93 : 8-11)

These two groups are made up of small jars or bottles with a high maximum diameter and a body tapered from the shoulder to a small base, either reshaped into a small ring or pedestal (Group 200 A 2) or convex (Group 200 A 3). The neck is vertical or concave. The rim is usually either rounded or outwardly thickened and horizontal. Plate 93 : 9 is decorated with a line of fingernail impressions.

228 GASCHE 1973, Pl. 12 : 2.

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These vessels are attested primarily in the Northern Alluvial Plain, where they appear most frequently in the 18th century. Several examples of Group 200 A 2 can be dated on either side of 1600. Both these groups appear to be variants of the main group, Group 200 A 1.

*COMPARANDA*

*Southern Alluvial Plain*

*Nippur* : *OIP* 78, Pl. 90 : 12 ; short neck with a simple rim.

## FAMILY 205

This family is made up of small jars with maximum diameters above the middle of the body.

### Group 205 A 1 (Plate 94 : 1-6)

Group 205 A 1 includes small jars that have ovoid bodies with maximum diameters above the midpoint. The flat bases are string-cut, the necks are vertical or slightly outward flaring, and the simple rims are tapered or rounded. The jars from northern Babylonia (Pl. 94 : 1-2) tend to be squatter and have a more angular profile than those from southern Babylonia (Pl. 94 : 3-4). This relatively small group of small jars, distinguished by its string-cut bases, represents a variant of the main group, Group 205 A 2, with finished and reshaped bases. One of the bases of this group is filled in (Pl. 94 : 1).

In the Northern and Southern Alluvial Plains, these jars can be dated to the 13th century. They are found in the Upper Diyala, where they are attested in the 13th-12th centuries. The group is also attested in the Habur Basin.

*COMPARANDA*

*Northern Alluvial Plain*

*'Aqar Qūf* : TAHA BAQIR 1945, Pl. 23 : Level I.
*Sippar (Abu Habbah)* : *BaM* 36, Pl. 20 : 213 (?) and 2803.

*Southern Alluvial Plain*

*Nippur* : besides Pl. 94 : 3-4 illustrated here, see also :
FRANKE 1978, fig. 71 : 15.
*OIP* 111, Pl. 82 : c.

*Habur Basin*

*Tell Mohammed Diyab* : CASTEL *et at.* 1993, fig. 2 : right.

### Group 205 A 2 (Plate 94 : 7 to Pl. 95 : 15)

Group 205 A 2 includes small jars with maximum diameters above the midpoint of the body. The bases have been drawn out and reshaped into either a low ringed foot or a higher pedestal (Pl. 94 : 10, and Pl. 95 : 6 and 9). The necks are usually vertical or flare slightly outward, and the rims are tapered or rounded. Both plugged (Pl. 94 : 7 and 13) and filled-in (Pl. 94 : 10) bases are attested in this group.

Plate 94 : 14, from the early 14th century, already displays the almost angular profile that is characteristic of northern Babylonian jars of this group and the variant Group 205 A 1 during the 13th century. In contrast with their southern counterparts they tend to have a somewhat lower maximum diameter, a broader, lower shoulder and a more acutely angled turn to the shoulder (Pl. 94 : 1-2, 7-8 and 10-11). While not unknown in southern Babylonia, this northern profile is only rarely encountered there (Pl. 95 : 7). Instead, by the latter half of the 13th century many southern jars have developed a higher, narrower shoulder (Pl. 95 : 5-6 and 8-9), giving them a different profile from the northern one. This distinctive southern profile emerges only in the 13th century ; the earlier southern jars have a rounder profile (Pl. 95 : 10-11 and Pl. 83 : 7). Not surprisingly, the northern profile is also attested the Diyala Basin (Pl. 95 : 13-14).[229] Both the earlier and later profiles typical in the South have been found in the Gulf (Pl. 83 : 9 and Pl. 95 : 15). In the 12th and 11th centuries, both the northern and southern profiles tend to be less angular, and regional differences in shape become less sharp (Pl. 94 : 5, Pl. 95 : 12 [Diyala] and Pl. 95 : 1-4 [southern Babylonia]).

Group 205 A 2 is the standard small jar of the latter part of Kassite Period, presumably serving functions similar to those of the earlier, somewhat larger jars of Group 165 A 2 (Pl. 83 : 1-2 and 7-9 ; late 15th-early 14th c.). In comparing the vessels of these groups it is immediately apparent that the size of the jars decreases over the centuries. The late 15th/early 14th-century jars of Group 165 A 2 (Pl. 83 : 1-2 and 7-9) are similar in size to only the smallest of the 16th-century jars of the same group (Pl. 83 : 3 and 6). In the succeeding centuries the average jar size decreases further. Only a few jars of the 14th-12th centuries in Babylonia proper (Pl. 94 : 7, and Pl. 95 : 5 and 10-11) even approach the size of the smallest jars of 16th-century Babylonia (Pl. 83 : 3 and 6).

The earliest attested example of Group 205 A 2, from Tell ed-Dēr, is dated to around 1400 (Pl. 94 : 14). It was found in the same stratigraphic context as the somewhat larger, more ovoid jar illustrated in Group 165 A 2 (Pl. 83 : 1). The group continues to be attested in northern Babylonia through the 13th century. In southern Babylonia, it is found in contexts dating to the 14th-13th centuries and then around 1100.[230] In the Diyala, this group is attested between the 13th and 12th centuries. It is also found in Western Iran and the Southern Zagros Piedmont. An example from the Gulf (Pl. 95 : 15) best fits in the 13th century on the basis of its shape and size (see Pl. 95 : 6 from the Southern Alluvial Plain).

*COMPARANDA*

*Northern Alluvial Plain*

*'Aqar Qūf* : TAHA BAQIR 1945 : Level IV.
*Babylon* : REUTHER 1926, 14, fig. 9 : k.
*Sippar (Abu Habbah)* : *BaM* 36, Pls. **22** : 2799 and **23** : 2875.
*Tell ed-Dēr* : besides Pl. 94 : 9-14 illustrated here, see also :
GASCHE 1991, fig. 5 : 4.
*NAPR* 6, Pls. **14** : 11, 13 to 16 and **15** : 1 to 3, 5 to 7 and 9.

*Southern Alluvial Plain*

*Isin* : besides Pl. 95 : 1-4 illustrated here, see also :
*Isin* 2, Pls. **31** : 19 (IB 976), 21 and 22 and **34** : IB 788a-b, IB 789a-b, IB 829a and IB 833a-b.
*Larsa* : besides Pls. 95 : 8-9 illustrated here, see also :
GASCHE in press, Pl. 5 : 109, sherd that is close to our Pl. 95 : 4.
PARROT 1968. fig. 14 : second and third columns.
*Nippur* : besides Pls. 95 : 5-7 and 10-11 illustrated here, see also :
FRANKE 1978, fig. 70 : 14-15.
*OIP* 78, Pl. 98 : 1, 3-4.
*OIP* 97, Pl. 49 : 8.
*OIP* 111, Pl. 81 : j.
*Warka* : *AUWE* 1, Pls. **53** : 536, **54** : 550-552 and **58** : 550, 552A.
BOEHMER 1988, Pls. 15 : 27.

*Middle Euphrates*

*Terqa* : THUREAU-DANGIN and DHORME 1924, Pl. 59 : 1.

*Diyala Basin*

*Tell ed-Dhiba'i* : MOHAMMAD ALI MUSTAFA 1949, Pl. IV : 9 and 11.
*Tell Imlihiye* : BOEHMER and DÄMMER 1985, Pls. **50** : 215-222 (drawings) and **56** : 220 and 222 (photos). >

229 Note that Plate 94 : 6 and 12, from the Diyala and the Northern Alluvial Plain respectively, do not represent intentional profiles. The shoulders of these two examples slumped during the drying process before firing.

230 The apparent gaps in attestation in both southern and northern Babylonia are due both to a lack of excavation and to a failure to isolate and identify the material from this period in instances where it was recovered.

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*Tell Muhammad* : AMEL METAB 1989-90, 150, illustr. 8 : 9, 10 and 11.
*Tell Songor B* : MATSUMOTO 1981, fig. 50 : 1 (high maximum diameter) and 2.
MATSUMOTO and YOKOYAMA 1989, figs. **20** : 1, **23** : 1, **44** : 1 and **53** : 1.
*Tell Zubeidi* : besides Pl. 95 : 13-14 illustrated here, see also : BOEHMER and DÄMMER 1985, Pls. **109** : 81, 82A, 84, **129** : 361, 363, 368-370B and **130** : 371-376, 378-380, 383, 387 (drawings) and **112** : 81, 82A and **113** : 84 (photos).

*Western Iran*

*Tepe Guran* : THRANE 2001, Pl. 30 : 12 = PONS and GASCHE 2006, fig. 3 : 2.

*Southern Zagros Piedmont*

*Pusht-i Kuh Cemeteries* : OVERLAET 2003, fig. 95 : DR.7-3, DR.6-4 and, possibly, BB.1-3. The other 23 small jars in this figure have their maximum diameters at or slightly below the midpoint of the body as opposed to the higher maximum diameters of the typical Babylonian shape ; therefore, they could be a local eastern variant. HAERINCK and OVERLAET 2010, 290, fig. 7 : 17.

## FAMILY 210

Family 210 consists of footed cups, generally with tall necks. Group 210 A 2 has a round, nearly globular body. The cups of Group 210 B 2 have a more angular profile with a higher maximum body diameter. Group 210 C 2 includes larger, taller cups.

### Group 210 A 2 (Pl. 96 : 1-9)

This group includes footed cups with a nearly globular body. The maximum diameter of the body is around its middle, and the lower body is usually somewhat tapered down to the foot. The base has been shaped to form a low foot or pedestal. The tall, outward flaring neck has either a tapered or rounded rim. The necks of Group 210 A 2 resemble the distinctly flaring necks on a number of the 16th-century fine-ware cups in Group 170 D 2 (Pl. 86 : 4, 6-7 and 10). Plate 96 : 3 and 7 still have relatively shorter necks, similar to a number of earlier examples in Group 170 D 2 (Pl. 86 : 5 and 8-9). The vessels in Group 210 A 2 are well shaped and well finished, like those of Group 170 D 2, but in contrast with many examples in Groups 210 B 2 and 210 C 2, which follow. Two examples, Pl. 96 : 1-2, have filled-in bases, a characteristic shared with cups in Groups 210 B 2 (Pl. 96 : 10-13 and 16-17) and 210 C 2 (Pl. 98 : 3, 5 and 7).

Group 210 A 2 is attested in northern and southern Babylonia during the 14th century. The earliest examples, from Tell ed-Dēr and Sippar (Abu Habbah ; Pl. 96 : 2-3), can be dated to as early as 1400. These are late contemporaries of the example from Susiana (Pl. 96 : 8, Susa A XI *ancien*). Group 210 A 2 is first attested in Susiana around 1450, but by the early part of the 14th century it had ceased being produced. The cups from Susiana help to link the 16th-century cups of Groups 170 C 1 and 170 D 2 (Pl. 86) with the 14th-century cups of Group 210 A 2. The profile of Plate 96 : 8 from Susa, though it is larger, is reminiscent of Plate 86 : 1-2 (Group 170 C 1). Plate 96 : 6-7, from Yelkhi in the Upper Diyala, belong in the 14th century, based both on context and on their rounded, near globular shapes. An example from Qala'at al-Bahrain in the Gulf can likewise be placed in the 14th century based on its shape (Pl. 96 : 9).

*Excursus:* Contemporary with Group 210 A 2 in the 15th and 14th centuries is a group of cups found in the Diyala Basin (fig. 15). These cups have globular bodies and straight, flaring necks usually with tapered rims. Their bases are usually reshaped into low pedestals. These cups are similar to cups from Nuzi in the 15th and 14th centuries (see especially STARR 1937, Pl. 78 : B-C and O). They are not attested south and west of the Tigris, inside Babylonia proper, so we refer to them as "Diyala cups" for purposes of this brief discussion. Earlier examples of these cups have been found at Yelkhi (VALTZ 2002-03, Pl. 149 : 3 and 10-19), alongside the earlier Babylonian cups of Group 210 A 2 (*ib.*, Pl. 150 : 6 and Pl. 151 : 1 = our Pl. 96 : 7 and 6 respectively). Later examples of Diyala cups, from the 13th/12th century are attested at Tell Zubeidi (*BaF* 7, Pl. 109 : 85, and Pl. 130 : 392 and 400) together with the later Babylonian footed cups of our Groups 210 B 2. and 210 C 2.

Precise statistics are not possible, given the limitations of our data. Nevertheless, within the Diyala region the Diyala cups predominate in the 15th and 14th centuries, and the Babylonian cups are comparatively infrequent. In the 13th and 12th centuries the situation is reversed, with the Babylonian cups occurring much more frequently than their Diyala counterparts.[231]

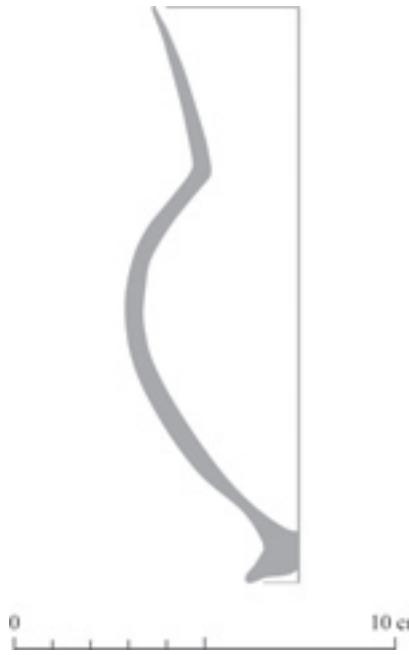


Fig. 15. Early 14th-century Diyala cup from the Hamrin.
Tell Yelkhi : HY 187, A, Level Ic, *giallo-verdastro*, ø rim : 77.
VALTZ 2002-03, Pl. 149 : 11.

*COMPARANDA*

*Northern Alluvial Plain*

*Kish* : DE GENOUILLAC 1925, Pls. **XIX** : 3 (photo) and **56** : 2 (drawing).
*Sippar (Abu Habbah)* : besides Pl. 96 : 3 illustrated here, see also : *BaM* 36, Pl. 22 : 2805 and 2808.
*Tell ed-Dēr* : besides Pl. 96 : 1-2 illustrated here, see also : *NAPR* 6, Pl. 12 : 1, 4 and 5.

*Southern Alluvial Plain*

*Nippur* : besides Pl. 96 : 4-5 illustrated here, see also : FRANKE 1978, fig. 70 : 1, 2, 4, 7 and 8.
*Ur* : WOOLLEY 1965, type 41.

*Diyala Basin*

*Bakr Awa (Shahrizor Plain)* : MIGLUS *et al.* 2013, 49, Fig. 12.[232]
*Khafajah* : *OIP* 63, Pl. 163 : B.656.720 resembles Pl. 96 : 3.
*Tell al-Zawiyah* : NADIR AL-RAWI 1979, figs. 24 and 25, several examples (photos).
*Tell Haddad* : BURHAN SHAKIR SULAIMAN 2003-04, 109, fig. 12 : 659.

*Gulf*

*Bahrain Cemeteries* : DENTON 1994, fig. 7. >

231 Indeed, the overwhelmingly Babylonian character of the ceramics of Tell Zubeidi and Kesaran (VALTZ 1985, fig. on p. 69), both kiln sites in the 13th-12th centuries, suggests that Babylonians were living in the Hamrin at that time.

232 Fig. 14a shows a very similar cup with a slightly thickened, rounded rim but the authors date it to the Late Middle Bronze Age (p. 49).

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LOMBARD (ed.) 1999, vessels in middle of photos on pp. 121-122.

*Qala'at al-Bahrain* : besides Pl. 96 : 9 illustrated here, see also : LOMBARD 1999, photo at the bottom of p. 9.

## Group 210 B 2 (Pl. 96 : 10 to Pl. 97 : 17)

This group of cups is characterized by a high maximum body diameter, inverted piriform bodies, drawn-out pedestal bases or feet, and tall, flaring necks with simple rounded or tapered rims. The earliest shape from Babylonia (Pl. 96 : 18), dated to the early 14th century, is at the limit between this group and the more globular Group 210 A 2. It represents the early stage of a trend toward higher maximum body diameters among these cups. As the position of the maximum body diameter rises through the 13th century, the size of the bodies tends to decrease. In some of the 13th-century examples, the body has lost all trace of its previously globular shape (Pl. 96 : 14, and Pl. 97 : 3-4, 12, 14 and 17). From the end of the 14th century, the care with which these vessels were shaped and finished decreases dramatically ; many 13th-century examples are very irregular.

Filled-in bases are typical of these cups (Pl. 96 : 10-13 and 16-17). The coarsely tempered clay incorporated into their high (thick), narrow feet helped them dry before firing without cracking.

Group 210 B 2 appears in northern Babylonia in the 14th century and continues into the 13th after the more globular examples of Group 210 A 2 have disappeared. It is likewise attested in the South in the 14th and 13th centuries and is found in the Diyala during the 13th and early 12th centuries. An early example from Susa can be dated to as early as the end of the 15th century (Pl. 97 : 15). Group 210 B 2 is also present in the Gulf, where the examples can be placed in the 13th century, based on their shapes.[233] The group is also attested in Western Iran.

*COMPARANDA*

*Northern Alluvial Plain*

*'Aqar Qūf* : TAHA BAQIR 1945, Pl. 23 : Levels I, II, III and IV.
*Babylon* : REUTHER 1926, 14, fig. 9 : m.
*Tell Abu Shijar (near 'Aqar Qūf)* : JASIM *et al*. 2006, fig. 9 : 4-5 ; see also fig 9 : 3 with a less globular body.
*Tell ed-Dēr* : besides Pl. 96 : 10 to 18 illustrated here, see also : *NAPR* 6, Pls. **12** : 7 and **13** : 1-2.

*Southern Alluvial Plain*

*Nippur* : besides Pl. 97 : 1-2, 4-5 and 7-8, see also :
*OIP* 78, Pl. 98 : 11-12.
*OIP* 97, Pls. **49** : 7 and 9 and **50** : 2.
*OIP* 111, Pls. **80** : b-e, g-h and **86** : d.
*OIP* 129, Pl. 168 : 5.
*Ur* : WOOLLEY 1934, type 74.
WOOLLEY 1965, type 35.
WOOLLEY and MALLOWAN 1976, type 69b.
*Warka* : *AUWE* 1, Pls. **54** : 556, 566-570 (sherds) and **58** : 556, 566 (photos).
BOEHMER 1988, Pls. 15 : 20.

*Diyala Basin*

*Tell ed-Dhiba'i* : MOHAMMAD ALI MUSTAFA 1949, Pl. IV : 14.
*Tell Zubeidi* : besides Pl. 97 : 9-14 illustrated here, see also : BOEHMER and DÄMMER 1985, Pls. **109** : 88, **131** : 401-406, 408, 410, 417-418, 420-422, 427-431.

*Gulf*

*Bahrain Cemeteries* : DENTON 1994, fig. 5. Three cups with a slightly lower neck than those of Group 210 B 2 ; DENTON 1994, 126 considers them as a local production.
*Failaka* : HØJLUND 1987, figs. 360, 368 and 369.

*Susiana*

*Susa* : besides Pl. 97 : 15 illustrated here, see also : PONS 1991, Pl. 19 : 6-7 (with plugged base; Exc. de Mecquenem).

*Western Iran*

*Tchogha Gavaneh* : KORDEVANI 1971, western language section, 35, fig. 22.
*Tepe Guran* : THRANE 2001, Pls. **30** : 5 (= PONS and GASCHE 2006, fig. 4 : 3) and **31** : 9 (= PONS and GASCHE 2006, fig. 4 : 4).

## Group 210 C 2 (Pl. 98 : 1-16)

The cups of Group 210 C 2 represent a larger, taller variant of the cups of the preceding Group 210 B 2. These cups generally

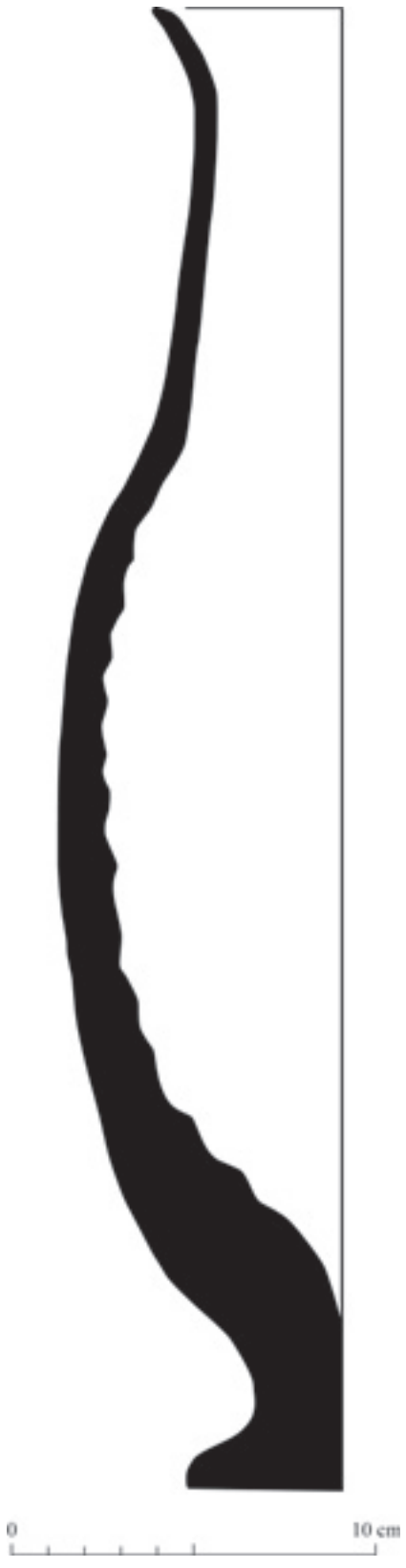


Fig. 16. Very tall example of Group 210 C 2 (c. 410 mm high).
Abu Shijar : Main Area, Level 2/B, ø rim : ± 105.
JASIM *et al.* 2006, fig. 10 : 4.

233 We have placed the example from Failaka (Pl. 97 : 16) somewhat later than the late 14th-century date HØJLUND 1987 (fig. 368, and pp. 109 and 159) assigns to his Period 4B.

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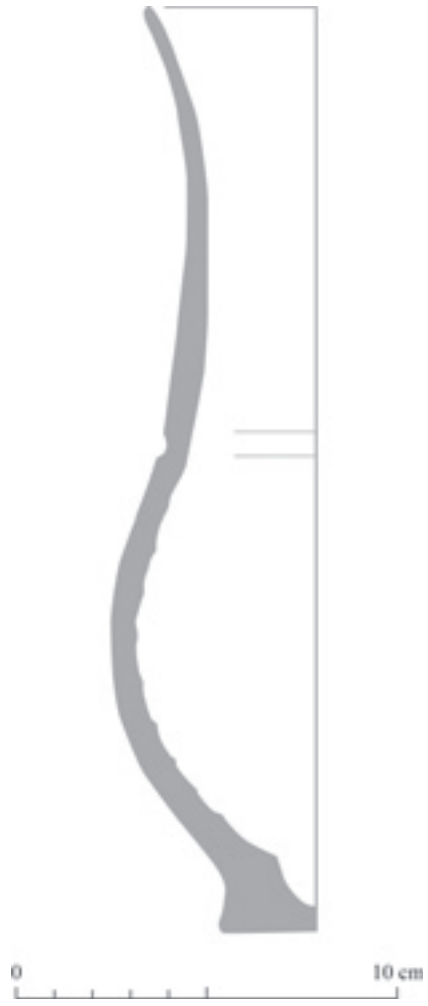


Fig. 17. Vessel of Group 210 C with a rare flat base.
Susa : GS-4208, A, Level XI *ancien*, *rougeâtre*, ø rim : 91.
*MDP* 47, Pl. 19 : 3.

have high maximum body diameters. The bodies tend to be more vertically oriented and more ovoid than is the case with Group 210 $B_2$. The bases have been shaped into feet or pedestals. The flaring necks have tapered or rounded rims; they are often very tall. Two bases were patched by the potter (Pl. 98 : 2 and 6), while several others were filled in with coarsely tempered clay during the throwing process (Pl. 98 : 3, 5 and 7).

Figure 16 is a very tall example of Group 210 $C_2$ (about 410 mm high) from Tell Abu Shijar near ʻAqar Qūf. A rare example with a flat base, from Susa, is shown in fig. 17.

Group 210 $C_2$ has a pattern of attestation similar to that of Group 210 $B_2$. It is found in northern Babylonia during the latter part of the 14th century and through the 13th. It also present in southern Babylonia in the 13th century. In the Diyala Basin it extends from the 14th century into the early 12th. The 14th century cup from the Diyala (Pl. 98 : 15), which is relatively early, is well shaped and well finished, in contrast with most of the later examples in Group 210 $C_2$. The group is also attested in the 13th century in the Gulf.

*COMPARANDA*

*Northern Alluvial Plain*

*ʻAqar Qūf* : TAHA BAQIR 1945, Pl. 23 :Level I, II, III and IV.
*Tell Abu Shijar (near ʻAqar Qūf)* : see our fig. 16.

*Southern Alluvial Plain*

*Isin* : HROUDA 1973, fig. 22 (IB 7).
*Nippur* : besides Pl. 98 : 9-12 illustrated here, see also :
FRANKE 1978, fig. 70 : 18.
*OIP* 78, Pl. 98 : 13.
*OIP* 97, Pl. 49 : 6.
*OIP* 111, Pls. **80** : k, probably l and **81** : a, c.
*Ur* : HALL 1930, 183, fig. 146 : center.
*Warka* : *AUWE* 1, Pl. 58 : 597A (photo).
BOEHMER 1988, Pls. 15 : 23.

*Diyala Basin*

*Tell Imlihiye* : besides Pl. 98 : 14 illustrated here, see also :
BOEHMER and DÄMMER 1985, Pls. **50** : 223 and 225-226 and **56** : 223 and 226 (photos).
*Tell Songor B* : MATSUMOTO 1981, fig. 50 : 3 = Fig. 93 : 1.
*Tell Zubeidi* : besides Pl. 98 : 13 illustrated here, see also :
BOEHMER and DÄMMER 1985, Pls. **131** : 409, 412-415 and 425.

*Gulf*

*Qala'at al-Bahrain* : besides Pl. 98 : 16 illustrated here, see also :
BIBBY 1972, fig. on p. 142, No. 20, and Pl. XVI below : second and third from left.
HØJLUND 1987, 156, fig. 697.

*Susiana*

*Haft Tepe* : NEGAHBAN 1991, fig. 6 : 64, probably later than the Middle Elamite I Levels of the site.
*Susa* : see our fig. 17.

## FAMILY 215

Family 215 is made up of tall shouldered vessels having maximum diameters above the middle of the body. We refer to these vessels as goblets. There is one group, which has a characteristic reshaped foot.

### Group 215 $A_2$ (Pl. 99 : 1 to Pl. 103 : 8)

Group 215 $A_2$ comprises the shouldered goblets of the second half of the 2nd millennium. The base of these goblets is a foot that has been drawn out and reshaped. The maximum diameter is above the middle of the body. The position of this maximum diameter rises over time, with the result that by the 14th century the shoulders have become very well defined. The necks in this group generally are either vertical or slightly concave and have rounded or tapered everted rims. Several examples from the late 15th and 14th centuries, however, have somewhat flaring necks (Pl. 99 : 4 and 7, and Pl. 100 : 1 and 5-6) like their 16th-century forebears (Pl. 62). Over time the overall shape of these goblets generally becomes slimmer as their lower bodies become more tapered. By the 13th century these conical lower bodies sometimes have solid feet to a height of 60 mm or more (e.g., Pl. 101 :1-2, Pl 102 : 1 and 4-5).

The dating of the early examples of this group to the 15th and 14th centuries has been discussed in detail elsewhere.[234] The earliest attested members of Group 215 $A_2$ have been found at Susa, where they first appear shortly before 1450, several decades after the fall of Babylon (Pl. 100 : 7).[235] The shape of these goblets at Susa is completely unprecedented there in the fifteenth century, but they closely resemble the somewhat later examples found in Babylonia. Their method of manufacture had certainly been introduced from Babylonia and involved the use of plugged bases, bases that were cut off from the wheel with a hole in the middle that the potter then filled with a plug of coarsely tempered clay.[236] Therefore, we are confident that goblets having the high maximum body diameter and broad, open shape of Group 215 $A_2$ were present in Babylonia in the first half of the 15th century, even though securely dated examples have not yet

234 *MHEM* 4, pp. 34-42.

235 The example shown in Pl. 100 : 7 is not unique in Level A XII of the Ville Royale of Susa. Field records indicate that at least 8 more goblets of the same shape were found in this level.

236 Coarsely tempered clay was introduced in order to prevent cracks from forming in the bases during drying (VAN AS and JACOBS 1987, 42 and 46-47, and "The Babylonian Potter : Environment, Clay and Techniques" below).

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been found. Figure 18 shows an early goblet from Susa (from Level XI *ancien*) with an uncharacteristically wide profile. Even in the case of this example, however, the morphological connection to more typical Early Kassite goblets is clear.

The earliest attested *Babylonian* examples of Group 215 A 2 are dated to the mid-/late 15th and 14th centuries (Pl. 99). The morphologically earliest example, from northern Babylonia (Pl. 99 : 4), is comparatively short, wide and open, and its lower body is still somewhat rounded down to the base. The other early goblets in this group have more tapered, less rounded lower bodies, though those bodies remain wider and more open than among the examples of the 13th century. These goblets date from the end of the 15th century through the 14th, and are attested in both northern and southern Babylonia. They are intermediate in shape between the 16th-century goblets of Group 95 A 2 (Pl. 62) and the goblets of Group 215 A 2 that date to the 13th century and after (Pls. 101-103).

A further point should be emphasized. The early examples in Group 215 A 2 from southern Babylonia did not develop from the corresponding southern goblets of the 17th century (Group 90 A 2 [Pl. 57 : 12 - Pl. 58 : 4]). There is no direct connection between these two groups of vessels. The goblets of the 15th and 14th centuries from southern Babylonia are direct successors of the 16th-century goblets of *northern* Babylonia, Group 95 A 2 (Pl. 62).

The earlier members of Group 215 A 2 generally have shorter, wider proportions when compared with the narrower examples of the 13th century. In terms of manufacture, they appear to be made with more care than their later counterparts. This may account for the relative openness of the bodies and thinness of the bases in comparison with many examples from the 13th century. In some cases, this may be due to the fact that they still had plugged bases (Pl. 99 : 2). But even among those goblets with filled-in bases (Pl. 99 : 1 and 4) the bases are relatively thin (or low) in comparison to many later examples.

Fragmentary goblets from the late 15th/early 14th century have also been found on Bahrain in the Gulf. Fourteenth-century contexts at Yelkhi in the Upper Diyala have yielded goblets that are similar to those of contemporary southern Babylonia.[237]

After the beginning of the 14th century, the further development of this shape in Susiana, with increasingly tall necks and slender bodies, was a local affair, completely separate from the development of Group 215 A 2 in Babylonia.[238] The tall-necked, slender goblets of Susiana are the so-called "Elamite" goblets, which continued to be produced until around 1000 BC.

The 13th-century goblet of Babylonia is the classic "Kassite goblet" with its slender profile, well-defined shoulder and virtually straight, tapered lower body, which frequently has a solid foot. It is well attested in northern and southern Babylonia. Indeed it is one of the most recognizable forms in Babylonian archaeology, and since almost every sherd, from rim to base, is diagnostic, the Kassite goblet is the type fossil *par excellence* for the Late Kassite Period. Filled-in bases are characteristic of these Late Kassite goblets (Pl. 101 : 5-6 and 9; VAN AS and JACOBS 1988, 2-3), though some examples were still being patched (Pl. 101 : 3 and 10, and Pl. 102 : 1). Plugged bases have largely disappeared by the 13th century, though the bases of a number of outsized (and therefore atypical) examples found at Tell ed-Dēr were, in fact, plugged (Pl. 101 : 8 ).[239]

The latest attestation of this goblet in Babylonia is not entirely certain. The best candidate for a post-13th-century goblet

Fig. 18. Goblet from Susa with a wide profile.
Susa : GS-4116, A, Level XI *ancien*, *jaunâtre*, ø rim : 88.
*MDP* 47. Pls. 31 : 3 and 65 : 7. Redrawn. Photo Ghirshman.

is at Warka (Pl. 102 : 3). Burial 80 (*AUWE* 10, Pls. 44-45), from which this goblet was recovered, was apparently dug from the same building and at approximately the same absolute elevation as Burial 81, in which a small red-painted bottle was found (Pl. 89 :7 ; *AUWE* 10, Pl. 44). This bottle is a post-13th century form ; it is unattested in 13th-century Nippur and Tell ed-Dēr. It is reasonable to suppose that the goblet in Burial 80 and the bottle in Burial 81 are of approximately the same date, but some degree of uncertainty remains.

Outside of Babylonia proper, the later goblets of Group 215 A 2 are attested in the Diyala Basin in the 13th and early 12th centuries. Farther upstream beyond the Hamrin, Kassite goblet fragments have been found at Bakr Awa in the Shahrizor Plain.[240] To the east they have also been attested at Tepe Guran in Western Iran. Babylonian and Babylonian-inspired goblets have been found as far up the Euphrates as Mari and Terqa.[241] In the Middle Tigris Basin Assur and Kar Tukulti-Ninurta have yielded the northernmost examples of fragmentary goblets. These goblets are also well attested in the Gulf.[242]

237 See also VALTZ 2002-03, Pl. 151 : 5-13.

238 See *MDP* 47, Pl. 19 : 9-22.

239 Sixteen such bases were found in the large Late Kassite pits dug from Ensemble 0 in Area E 3 of Tell ed-Dēr.

240 P. Miglus, personal communication.

241 PONS and GASCHE 1996, fig. 2 : 1-2.

242 Plate 103 : 8 has been placed in the 13th century based on its late shape and solid foot, later than the 15th-14th-century date given by HØJLUND (1987,

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*COMPARANDA*

*Northern Alluvial Plain*

*'Aqar Qūf* : TAHA BAQIR 1945, Pl. 23 : Level I, left, and Level III, right.

*Babylon* : REUTHER 1926, 14, fig. 9 : f-g, Pls. **47** : 13-a and **48** : 17-1, 24-a, b and 27-a.

*Kish* : DE GENOUILLAC 1924, Pl. X : 1 = Pl. 53 : 136.
*Id.*, 1925, Pl. XVIII : 2, lower row, center.
LANGDON 1924, Pl. 28 : 3, wrongly dated 'Late Period'.

*Tell ed-Dēr* : besides Pls. **99** : 1, 2, 4, **101** : 3-6, 8-10 and **102** : 2 illustrated here, see also :
*NAPR* 6, Pls. **10** : 3 to 9, 11, and **11** : 4.
GASCHE 1991, fig. 7 : 4.

*Sippar (Abu Habbah)* : besides Pl. 99 : 3 illustrated here, see also :
AL-JADIR and ZUHIR RAJAB ABDULLAH 1983, 119, figs. 21-22 (bases).
*BaM* 36, Pls. **21** : 179 and 2841 and **25** : 2814.

*Southern Alluvial Plain*

*Isin* : besides Pl. 102 : 4 and 7 illustrated here, see also :
*Isin* 1, Pl. 28 : IB 461.
*Isin* 4, Pl. 55 : 20.

*Larsa* : besides Pl. 103 : 1-2 illustrated here, see also PARROT 1968, fig. 14.

*Nippur* : besides Pls. **99** : 5-11, **102** : 5-6, 8-9 and **103** : 3 illustrated here, see also :
ARMSTRONG 1993, Pls. **69** : a-c, e and h, **70** : i, **79** : a-cc, **86** : e-g and **88** : c.
FRANKE 1978, fig. 66 : 2, 4 and 6-10.
*OIC* 22, figs. **32** : 2-3, **44** : 330077, **45** : 030137 and **87** : 6-7.
*OIP* 78, Pl. 98 : 14, 15 (lacking high shoulder) and 16.
*OIP* 111, Pls. 79 : a-s, u--z, aa-cc, **86** : e-g and **88** : c.
*OIP* 129, Pls. **69** : b (left) and **168** : 2 and 3.

*Warka* : besides Pl. 102 : 3 illustrated here, see also :
*AUWE* 1, Pls. **51** : 474 to **53** : 521 (many sherds) and **58** : 483, 496-498 (photos).
*AUWE* 10, Pls. **38** : *Grab* 66a-b, **39** : a and **40** : *Grab* 70c-d.
BOEHMER 1988, Pls. 13-14.
FINKBEINER 1985, fig. 20 : 42.

*Ur* : WOOLLEY 1934, type 72.
WOOLLEY and MALLOWAN 1976, type 109.

*Middle Euphrates*

*al-Jannadiya* : SABAH JASIM ABDUL-AMIR 1988, p. 527 : No. 2.

*'Āna* : KILLICK 1988, fig. 30 : 48, probably also 30 : 45, 9th - first half of the 8th c.[243]

*Mari and Terqa* : PONS and GASCHE 1996, fig. 2 : 1-2

*Middle Tigris Basin*

The examples from the Middle Tigris Basin represent the northernmost attestations of Group 215 $A_2$.

*Assur* : ANDRAE 1977, 183, fig. 163 (photos).
BEUGER 2005, Pl. 106 : 24-26 (base sherds).

*Kar Tukulti Ninurta* : BURHAN SHAKIR SULAIMAN 2010, Pl. 160 : 5-8 (rims probably broken).
DITTMANN *et al.* 1988, fig. 19 : 10.18a1 and 10.18b1 = DITTMANN *et al.* 1989-90, fig. 2 : 7-8.
SCHMIDT 1999, figs. **6b** : 35 and **7b** : 16.

*Diyala Basin*

*Tell Imlihiye* : BOEHMER and DÄMMER 1985, Pls. **48** : 203-207, **49** : 210-212, **53** : 276 (drawings) and **56** : 211 (photo).

*Tell Ajamat* : ARMSTRONG 1981, Pl. 115 : 96 and probably 98.

*Tell al-Zawiyah* : NADIR AL-RAWI 1979, fig. 24, top right (photos).

*Tell ed-Dhiba'i* : AL-GAILANI 1965, Pl. 1 : 6.

*Tell Haddad* : BURHAN SHAKIR SULAIMAN 2003-04, 110, fig. 16 : 807 and 808.

*Tell Muhammad* : AMEL METAB 1989-90, 150, fig. 9 : 3.

*Tell Songor B* : possibly MATSUMOTO 1981, fig. 50 : 11 (warped and with a wider body).

*Tell Zubeidi* : besides Pl. 103 : 4-6 illustrated here, see also :
BOEHMER and DÄMMER 1985, Pls. **109** : 76-77, **128** : 340-341, 343-350 and **129** : 351-353 and 335-356 (drawings) and Pls. **112** : 75 and **136** : 350A-351 (photos).

*Gulf*

*Bahrain Cemeteries* : DENTON 1994, figs. **3** and **23**.
*Id.* 1999, fig. 3.
LOMBARD (ed.) 1999, 125, No. 162 (photo).

*Failaka* : besides Pl. 103 : 8 illustrated here, see also :
HØJLUND 1987, figs. 348-349, 351-352, 397-398 and 401.

*Khor Ile-Sud (Qatar)* : EDENS 1999, probably fig. 7 : 7 (Late Kassite).

*Qala'at al-Bahrain* : BIBBY 1972, fig. on p. 142, No. 21, and Pl. XVI below : left and right.
HØJLUND and ANDERSEN 1994, figs. 748 and probably 747.
*Id.* 1997, figs. 184-189 and 199 ; see also figs. 195 and 197.
KERVRAN *et al.* 1987, probably figs. 14 and 16 (Late Kassite).

*Susiana*

*Susa* : besides Pl. 100 : 6-7 illustrated here, see also :
*MDP* 47, Pl. 19 : 16 and 21.
PONS 1991, Pl. 12 : 1.

*Tchogha Zanbil* : besides Pl. 100 : 5 illustrated here, Group 215 $A_2$ is well attested in *MDP* 39 and 40, but we refer here only to PONS 1991, Pl. 12 : 2, 3 and 7 for good parallels, because the drawings in *MDP* 39 and 40 are sometimes confusing.

*Western Iran*

*Tepe Guran* : THRANE 2001, Pl. 30 : 1, 2 (= PONS and GASCHE 2006, fig. 6 : 2 and 3 respectively) and 3, 4, 8 and 9 ; see fig. 61 (not 60) on p. 71 for photos.

## FAMILY 220

This very small family consists of tall bottles with sinuous or S-shaped necks.

### Group 220 $A_1$ (Pl. 104 : 1-2)

This group includes tall bottles with sinuous or S-shaped necks. Bodies have well-defined shoulders and taper to a small string-cut base. Rims are tapered.

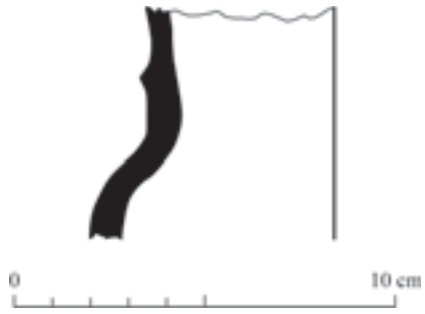


Fig. 19. Sherd from a vessel possibly belonging to Group 220 $A_1$.
Tell ed-Dēr : 102717*, A, Phase IVa, 2.5YR 6/6, ø rim : -. *TD* 4, Pl. 8 : 16.

Complete profiles of vessels belonging to Group 220 $A_1$ have been found only in the Southern Alluvial Plain in early 19th century contexts. However a sherd found at Tell ed-Dēr in northern Babylonia, illustrated here as fig. 19, preserves part of the neck and shoulder of an apparently similar, though somewhat larger, vessel.

*COMPARANDA*

*Southern Alluvial Plain*

*Ur* : WOOLLEY and MALLOWAN 1976, type 117.

fig. 350, and pp. 109 and 159) to Failaka Period 4A-B, to which it is assigned.

243 For remarks concerning the dating of the 'Āna sherds, see PONS and GASCHE 1996, 290-292, *sub* 'Āna.

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## FAMILY 225

This family consists of tall bottles with ovoid bodies, flaring necks and simple, tapered rims. Both flat and ring bases are present.

### Group 225 $A_1$ (Pl. 104 : 3-5)

Group 225 $A_1$ includes tall ovoid bottles. The small bases are flat and apparently unfinished. The flaring necks have simple, tapered rims. One incomplete example is significantly larger than the others (Pl. 104 : 4). Very large examples are also found in the ring-based Group 225 $A_2$ (Pl. 104 : 6 and 10-11).

All the examples of this flat-based group are from Warka in the Southern Alluvial Plain. One feature that they have in common is that their maximum diameter is at the middle of the body. Based on the date of a ring-based example of Group 225 $A_2$ from Isin (Pl. 104 : 6), which also has its maximum diameter around the middle of the body, we have placed these bottles of Group 225 $A_1$ at around 1700, but that dating is uncertain.

### Group 225 $A_2$ (Pl. 104 : 6-11)

This group is made up of tall ovoid bottles with ring bases. The flaring necks end in simple, tapered rims. Several examples are very large, more than 40 cm tall (Pl. 104 : 6 and 10-11). Among the few complete or nearly complete examples, the earlier (19th-18th c.) have their maximum diameter in the upper part of the body and their shoulders are more pronounced as a result. Based on a single example from Isin (Pl. 104 : 6), it is possible that the later examples of this group have maximum diameters near the middle of the body. Although we have arranged the remaining examples, all from Warka, according to this premise (Pl. 104 : 7-9 ; see also Pl. 104 : 3-5), it remains speculative.

Group 225 $A_2$ is found only in the Southern Alluvial Plain and is attested from the 19th century to around 1700.

*COMPARANDA*

*Southern Alluvial Plain*

Warka : besides Pl. 104 : 7-9 illustrated here, see also :
VAN ESS 1988a, figs. **33** : 191, 192 and **34** : 198.

## FAMILY 230

This family consists of tall, shouldered vessels typically with more-or-less tapered lower bodies and small bases. The different groups are variants of the same basic shape, distinguished by different bases (flat, ring, convex and nipple). The vessels of this family come in two sizes. The larger examples range between 20 and 25 cm in height, while the smaller range between 11 and 17 cm. Family 230 is attested only in the Southern Alluvial Plain and is diagnostic for the 17th century, the period of Hammurabi and Samsuiluna.

### Group 230 $A_1$ (Pl. 105 : 1-2)

Group 230 $A_1$ includes tall shouldered vessels with unfinished flat bases and a somewhat tapered lower body. The maximum diameter is in the upper part of the body, resulting in a more-or-less distinct shoulder. Bases tend to be small ; the base of Pl. 105 : 2 is larger than usual. Flaring necks spring from the shoulder and terminate in simple rounded or tapered rims.

This group is found only at Nippur in the Southern Alluvial Plain. Examples date to the 17th century.

### Group 230 $A_2$ (Pl. 105 : 3-7)

Group 230 $A_2$ consists of tall shouldered vessels with small ring or otherwise finished (Pl. 105 : 5) bases. The line of maximum diameter is usually high on the body, creating a tapered lower body. Rarely the maximum body diameter is lower down (Pl. 105 : 7). The flaring neck springs from the shoulder, which sometimes is set off by a narrow, articulated ledge (Pl. 105 : 4-6). Rims are rounded or tapered.

These vessels are attested only at sites in the Southern Alluvial Plain and are apparently limited to the 17th century.

*COMPARANDA*

*Southern Alluvial Plain*

*Larsa* : besides Pl. 105 : 4-6 illustrated here, see also :
CALVET *et al*. 2003, fig. 32 : c. The shape of this vessel is very close to our Pl. 105 : 4, but the dimensions are slightly different.
GASCHE in press, Pl. 4 : 95-98, sherds that probably belong to Group 230 $A_2$.

### Group 230 $A_{3\,\&\,4}$ (Pl. 106 : 1-11)

The members of Group 230 $A_{3\,\&\,4}$ are tall high-shouldered vessels with convex bases, often terminating in a nipple (Group 230 $A_4$ : Pl. 106 : 1, 4-5 and 6-10) The maximum diameter occurs in both the upper and lower body about equally, but, despite the resulting variations in vessel shape, the group holds together because the lower bodies in all examples taper down to small bases. Flaring necks spring from shoulders that sometimes have articulated ledges (Pl. 106 : 3 and 8-9) and terminate in rims that are tapered or rounded.

The vessels of Group 230 $A_{3\,\&\,4}$ are found at sites in the Southern Alluvial Plain during the 17th century. This group is also probably attested on Failaka in the Gulf.

*COMPARANDA*

*Southern Alluvial Plain*

*Isin* : besides Pl. 106 : 3 illustrated here, see also :
*Isin* 3, Pls. **26** : 8 and probably **30** : 14 (IB 1633).
*Isin* 4, Pl. 55 : 1.

*Larsa* : besides Pl. 106 : 6-10 illustrated here, see also :
CALVET 2003, figs. **46** : 27.49, **52** : 27.241, **54** : 27.40, **55** : 27.501 and 27.503, **57** : 27.567, **60** : 59.32 and **68** : 59.120.
CALVET *et al*. 2003, figs. **14** : a-l and **32** : a = PARROT 1968, fig. 16 : right.
GASCHE in press, Pl. 4 : 102-106.

*Nippur* : besides Pl. 106 : 1-2, 4-5 and 11 illustrated here, see also :
FRANKE 1978, fig. 60 : 7.

*Ur* : probably HALL 1930, 182, fig. 144 : third vessel from left and third from right.
QASSIM R. HANEEN 2003-04, 53, Pl. 8 : top center (photos).

*Gulf*

*Failaka* : probably CALVET 1984, 61, fig. 27 : 66. Base only.

## FAMILY 235

Family 235 consists of a single group of small to medium-sized ring-based jars with tall ovoid bodies.

### Group 235 $A_2$ (Pl. 107 : 1-9)

Group 235 $A_2$ is made up of small to medium-sized jars with ring bases, tall ovoid bodies with high maximum diameter resulting in a rounded shoulder. Necks are vertical or slightly flaring, and the simple rims are rounded. Plate 107 : 4, with its smaller size, high shoulder and out-curving neck, is at the very limit for this group.

Though not very common, this group has been attested in the Northern Alluvial Plain in the early 17th century and again in the middle of the 16th. The gap between these two examples is unexplained. Given that this is an 18th-17th-century shape in southern Babylonia (see below), it may be that while Plate 107 :

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2 (early 17th century) belongs in the group with the southern examples, Plate 107 : 1 (mid-16th century) should be excluded. In any case, as has already been stated, the group is not common in northern Babylonia.

Examples also come from Nippur and Isin in the Southern Alluvial Plain in the 18th and early 17th centuries. This group occurs in the Diyala between the 18th and early 16th centuries. The relationship between the Babylonian forms and those from the Diyala is not as clear as we would like, mainly due to the lack of examples, particularly in the Northern Alluvial Plain. It may be that the group initially spread from the Diyala during the 18th century, reaching as far as southern Babylonia.

*COMPARANDA*

*Diyala Basin*

*Tell ed-Dhiba'i* : MOHAMMAD ALI MUSTAFA 1949, probably Pl. V : 34.
*Tell Yelkhi* : Besides Pl. 107 : 8-9 illustrated here, see also: GABUTTI 2002-03, Pl. 91 : 2-4 and 6.

## FAMILY 240

Family 240 is made up of four groups of small to medium-sized jars having bodies with a maximum diameter above the midpoint of the body. The jars of Groups 240 $B_2$ and 240 $C_{2\&3}$, though they have shoulders, are wide and nearly globular. Necks are vertical or flaring, and rims are thickened and shaped.

### Group 240 $A_1$ (Pl. 108 : 1-3)

This group includes jars with a relatively high maximum diameter resulting in a pronounced shoulder. Lower bodies are tapered. Bases are flat and unfinished. Necks are slightly flaring and terminate in triangular, outwardly beveled rims.

This is a minor group in the alluvial plain. The southern Babylonian examples both come from Umm al-Hafriyat and date to the 19th-18th centuries. The northern example from Tell ed-Dēr dates to the end of the 20th century ; it has a more rounded shoulder and a more globular appearance than the later vessels in the group.

### Group 240 $A_2$ (Pl. 108 : 4)

Group 240 $A_2$ represents the ring-base equivalent to Group 240 $A_1$. The single illustrated example has a relatively high maximum diameter ; a pronounced, but rounded, shoulder ; and a vertical neck terminating in a thickened, outwardly beveled rim. This vessel, which comes from Tell ed-Dēr in the Northern Alluvial Plain, can be dated to the 18th century. This minor group is probably also attested in the Southern Alluvial Plain and in the Lower Diyala Basin.

*COMPARANDA*

*Southern Alluvial Plain*

*Tell Laham* : FUAD SAFAR 1949, probably Pl. IV : 3 and 5.

*Diyala Basin*

*Tell ed-Dhiba'i* : MOHAMMAD ALI MUSTAFA 1949, probably Pl. V : 28.

### Group 240 $B_2$ (Pl. 108 : 5 to Pl. 109 : 2)

Group 240 $B_2$ consists of ring-based jars that generally have their maximum diameter somewhat above the middle of the body. However, their bodies are more globular in shape than is true of Group 240 $A_2$. The jars in Group 240 $B_2$ have broad, rounded shoulders. Their necks are generally concave and terminate in rounded (Pl. 108 : 5-6), horizontal (Pl. 108 : 7) or outwardly beveled (Pl. 109 : 1-2) rims. Plates 108 : 5-6 and 109 : 2 have incised comb decoration on their shoulders.

Group 240 $B_2$ is attested at several sites in the Southern Alluvial Plain. The chronological position of this group is anchored by the examples from Warka (Pl. 108 : 5-6), which can be placed in the 20th century.

*COMPARANDA*

*Southern Alluvial Plain*

*Nippur* : *OIP* 78, possibly Pl. 91 : 1-2 but with a higher shoulder than is present on these late Ur III jars.

### Group 240 $C_{2\&3}$ (Pl. 109 : 3-9)

This small and diverse group of jars is not as closely defined as we would like. The vessels have high maximum diameters ; pronounced, though rounded, shoulders ; vertical to flaring necks ; and thickened rims with several different shapes. Among the rims included in this group are several that are elongated and rounded and sometimes have an extra thickening on the underside giving them a somewhat "droopy" appearance (Pl. 109 : 7 and 9) ; these elongated droopy rims are very diagnostic for the 20th century (Ur III Period) at Nippur.[244] Shoulders are sometimes decorated with horizontal combing (Pl. 109 : 3-4 and 8).

The group may represent a variant of the contemporary Group 240 $B_2$. Both groups share the same pronounced shoulders and bodies that are about as high as they are wide. In particular, the examples shown in Plate 109 : 1-2 (Group 240 $B_2$) have profiles that are close to those found in Group 240 $C_{2\&3}$.

Figure 20, which can be dated to the 19th century (Early Isin-Larsa Period), has the same upper body characteristics members of Group 240 $C_{2\&3}$ – rim, neck and shoulder – but its body is taller and narrower. This jar illustrates the phenomenon that the

Fig. 20. Tall vessel with the characteristic rim-neck-shoulder of Group 240 $C_{2\&3}$.
al-Hiba : 5 H 14, B, 5Y 7/3, ø rim : 109. Burial 5 HB 5.

244 See also *OIP* 129, Pl. 122 : 3-5 and 7, all dated to the Ur III Period.

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more-or-less globular jars of the 20th century (Groups 240 $B_2$ and 240 $C_{2\&3}$) tend to be replaced by taller, slimmer jars in the 19th century (see also the tall, slim jars of Group 250 $B_2$ on Pl. 112).

At both Tell ed-Dēr in the Northern Alluvial Plain and Nippur in the South Group 240 $C_{2\&3}$ is dated to the 20th century. It may also be attested in the Diyala Basin.

*COMPARANDA*

*Southern Alluvial Plain*

*Fara* : MARTIN 1988, fig. 42 : 9 (diam.?), 11 and 13.

*Diyala Basin*

*Tell Songor A* : KAMADA and OHTSU 1988, fig. 14 : P.15 ; close to our Pl. 109 : 3.

## FAMILY 245

Family 245 includes one group of tall, slender vessels with narrow shoulders.

### Group 245 $A_2$ (Pl. 110 : 1-3)

This minor group includes tall, slender vessels with ring bases, high maximum diameters, narrow shoulders and vertical necks terminating in tapered or rounded rims.

Attested at Tell ed-Dēr in northern Babylonia and Nippur in the South, all examples can be attributed to the 18th century, in the latter part of the Isin-Larsa Period.

## FAMILY 250

This family consists of three groups of medium-sized jars with tapered bodies and vertical or flaring necks.

### Group 250 $A_1$ (Pl. 110 : 4-5)

This minor group of tall, slender, flat-based jars with narrow shoulders, vertical necks and band rims has been identified at Warka in the Southern Alluvial Plain. The group cannot be closely dated, but may date to around 1700 (Late Isin-Larsa Period).

### Group 250 $A_2$ (Pl. 110 : 6 to Pl. 111 : 7)

Group 250 $A_2$ consists of medium-sized jars with tapered lower bodies below a high maximum diameter. They have ring bases. The pronounced shoulders often bear horizontal comb decoration. The necks tend to flare outward from the vertical and terminate in a thickened band rim. Plate 111 : 7, from Larsa and dated approximately to the early 18th century, has a plugged base, the earliest identified thus far.

This group is well attested at Tell ed-Dēr in the Northern Alluvial Plain from around 1900 through the middle of the 18th century. Group 250 $A_2$, closely dated at Tell ed-Dēr, is very diagnostic for the 19th and the first half of the 18th centuries in northern Babylonia (chiefly the Early Isin-Larsa Period). Several examples come from the Southern Alluvial Plain, though we have not been able to date the group closely there.

*COMPARANDA*

*Northern Alluvial Plain*

*Abu Qubur* : DE MEYER and GASCHE 1986, fig. 8 : 28-30.

*Sippar (Abu Habbah)* : *Sumer* 54, Pls. **47** : 1-3 (neck/rim sherds) and **49** : 6.

*Southern Alluvial Plain*

*Larsa* : besides Pl. 111 : 7 illustrated here, see also : CALVET *et al*. 2003, fig. 28 : c-e, g-h and j-m (sherds).

GASCHE in press, Pl. 5 : 117-118, sherds that probably belong to Group 250 $A_2$.

*Telloh* : DE GENOUILLAC 1936, Pls. **111** : 26 and **XXVIII** : 3201.

*Ur* : HALL 1930, fig. 143 : first vessel from left and probably first from right.

### Group 250 $B_2$ (Pl. 111 : 8 to Pl. 112 : 9)

Group 250 $B_2$ is made up of medium-sized to large jars with ring bases. The body tapers toward the base below a high maximum diameter that sets off a rounded shoulder. In several cases the shoulders bear horizontal comb decoration (Pl. 111 : 8-9 and Pl. 112 : 2). This decoration extends partway down the body of Plate 112 : 8. Necks are vertical or flare slightly outward. Rims are thickened and are outwardly beveled or sometimes rounded (Pl. 112 : 4 and 6).

Examples come from various sites in the Southern Alluvial Plain. The group is attested from the late 20th to the early 18th century. It is very diagnostic for this range of time, chiefly the Early Isin-Larsa Period, in southern Babylonia. It is also attested in the Diyala Basin.

Groups 250 $A_2$ and 250 $B_2$ appear to be variants of one another. It may be that the southern variant (Group 250 $B_2$) appeared first, in the latter part of the 20th century (Ur III Period) ; however, it must be remembered that the 20th-century exposures at Tell ed-Dēr (in northern Babylonia) are limited and the absence of examples may not be meaningful. Group 250 $B_2$ was produced in a broader range of sizes than Group 250 $A_2$, including both medium-sized and larger (Pl. 112 : 2) examples. Jars with several different rim shapes were made in the South, including a small number of jars with the band rim of Group 250 $A_2$. On the other hand, the North employed the band rim exclusively. Both groups were produced during the 19th and early 18th centuries. Over the course of the 18th century both disappeared.

*COMPARANDA*

*Southern Alluvial Plain*

*Nippur* : besides Pl. 112 : 4, 6 and 9 illustrated here, see also : *OIP* 78, Pl. 86 : 8 (conical, slightly convex side).

*Larsa* : besides Pl. 112 : 8 illustrated here, see also : CALVET 2003, fig. 47 : 27.63. CALVET *et al*. 2003, fig. 28 : a and b.

*Diyala Basin*

*Tell Owessat* : JAKOB-ROST *et al*. 1983, fig. 25 and Pl. 16, right.

## FAMILY 255

Family 255 is made up of small to medium-sized jars with a high maximum diameters. The body tapers inward to a ring base. The transition to the shoulder is usually set off by a ridge. Variants of the basic group in this family (Group 255 $A_2$) have false (Group 255 $B_2$) or genuine (Group 255 $C_2$) spouts (or vents) arranged around the neck.

### Group 255 $A_2$ (Pl. 113 : 1-12)

Group 255 $A_2$ includes small to medium-sized jars with ring bases and bodies having a high maximum diameter. Below the shoulder the body tapers inward to the base. The shoulder is set off from the body by a ridge, and concentric horizontal ridges on the shoulder occur frequently. Rarely there are decorative incisions on the shoulder. The short neck usually flares outward, though vertical necks also occur at Susa (Pl. 113 : 10). A band rim is common among examples from the alluvial heartland (Pl. 113 : 1-2 and 5-7). Outwardly thickened and beveled rims are common in the peripheral regions of the Diyala and Susiana (Pl. 113 : 8-12).

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The shape is attested in northern Babylonia during the first half of the 20th century (Ur III Period). It is also found in the South in the 20th century, where examples both with and without multiple shoulder ridges are known.[245] In the Diyala and in Susiana, it appears in the 20th century and continues into the early 19th (early Isin-Larsa Period). The group is also attested in the Middle Tigris Basin and probably in the Gulf.

Group 255 A 2 is characteristic for the 20th century (Ur III Period) in Babylonia proper. Similar jars occur in the preceding Akkadian Period, as well (see *Comparanda*).

*COMPARANDA*

*Northern Alluvial Plain*

*Tell ed-Dēr* : besides Pl. 113 : 1-4 illustrated here, see also : *TD* 4, Pls. **10** : 12 (fragment of a miniature vessel), **10** : 13 and probably **18** : 10-11.

*Umm el-Jīr* : GIBSON 1972a, figs. **42** : f (without ridges) and i (straight conical body), **43** : B-2, 5, B-3b, 12, B-4, 11 and B-5, 12-13, **44** :B-10, 12, **46** : Phase IV, 23 and Phase I, 7, **47** : C-1, 6 and 48 : 7 (Akkadian-Ur III).

*Southern Alluvial Plain*

*Nippur* : *OIP* 129, Pls. 109-110 (Akkadian-Ur III).

*Tell al-Wilaya* : HUSSEIN *et al*. 2009, fig. 28 : b, c, e, f and g ; see p. 22 for chronological information.

*Telloh* : DE GENOUILLAC 1936, Pl. 111 : 2c.

*Warka* : VAN ESS 1993, fig.14 : 174.

*Ur* : WOOLLEY and MALLOWAN 1976, type 97.

*Habur Basin*

*Tell Brak* : MATTHEWS (ed.) 2003, figs. 6.55 : 1 and 6.57 : 2 (Akkadian).
OATES, D. & J. and MCDONALD 2001, fig. 425 : 815 (Akkadian).

*Middle Tigris Basin*

*Assur* : ANDRAE 1977, figs. 92 and 162.
BEUGER 2005, Katalog 1, Pl. 29 : 12-13, and Katalog 2, Pl. 73 : 6-8 and 12-14.
HALLER 1954, Pl. 1 : b = HOCKMANN 2010, Pl. 20 : 2305.
HOCKMANN 2010, Pls. **117** : 23082ad, **120** : 23082ap, and **121** : 23082ay and 23082az. The examples from Assur never have shoulders with multiple ridges.

*Nuzi* : STARR 1937, Pls. **52** : I and **53** : A, C.

*Diyala Basin*

*Tell Abu Qassem* : AWAD AL-KASSAR 1979, fig. 6, 3 jars on top (photos).

*Tell Asmar and Khafajah* : *OIP* 63, Pl. 176 : C.466.370, 466.450, 467.470, 467.350 and 477.350, Proto-Imperial to Ur III.

*Gulf*

*Barbar (Bahrain)* : ANDERSEN and HØJLUND 2003, probably figs. 492, 493, 536-538, 540, 541, 544, 548, 549, 638, 640 and 641 (all sherds).

*Qala'at al-Bahrain* : HØJLUND and ANDERSEN 1994, fig. 280, 419, 495, 535 and probably 536 (all sherds).

*Susiana*

*Susa* : besides Pl. 113 : 10-12 illustrated here, see also : CARTER 1980, figs. **32** : 1 (Late Akkadian), **33** : 1 = Pl. IX : 8 and **35** : 3 (Akkadian).
DE MECQUENEM 1928, fig. 36, left.
*Id*. 1934, fig. 55 : 8.
*Id*. 1943, fig. 69 : 19-21.
*MDP* 46, Pls. **2** : 12 (= **65** : 6, miniature jar, Ur III), **5** : 30-36 (Late Akkadian) and **12** : 6, 7, 10 and 24 (Akkadian).
*MDP* 47, Pl. 27 : 2-3.

245 For examples lacking shoulder ridges from Nippur, see *OIP* 129, Pl. 109 : 14-17.

## Group 255 B (Pl. 114 : 1-19)

Based on the profile of a single whole vessel (Pl. 114 : 14), this group most likely had the same overall body shape as Group 255 A 2. Plate 114 : 14 has an ovoid body with a high maximum diameter ; it has a ring base, though more whole profiles are needed to be certain that this was true for the group as a whole. Among the sherds the transition from body to shoulder is often marked by one or more ridges. Additional decoration sometimes is present in the form of rope decoration (Pl. 114 : 4 and 13), multiple ridges (Pl. 114 : 17), grooves (Pl. 114 : 11 and 14) and comb incisions (Pl. 114 : 2). Necks are vertical or flare outward. Band rims are common (Pl. 114 : 3, 6-10), but beveled (Pl. 114 : 1 and 13-15), rounded (Pl. 114 : 4 and 11) and other rims also occur.

The most characteristic decoration for Group 255 B consists of multiple false spouts (or vents) that were placed around the neck. These false spouts were frequently small clay cylinders, tops of which were indented to give them the appearance of tubes. The false spouts sometimes were actual tubes of clay (Pl. 114 : 4, 10, 12 and 15), but the vessel wall itself was never pierced, so these tubes were non-functional. Evidence of the upward pressure applied on the interior of the shoulder to help affix the spouts is sometimes visible in the drawings (Pl. 114 : 2, 8, and 11-13).

This group first appeared in the Southern Alluvial Plain in the 20th century (Ur III Period), based on the example from Nippur (Pl. 114 : 15), and seems to have continued into the 18th century, though the latest examples (Pl. 114 : 12-13) are not closely datable. Based on the evidence of sherds from Tell ed-Dēr, Group 255 B was present in the North during the 19th and 18th centuries, that is, throughout the Isin-Larsa Period. The shape is also found in the Diyala over the same range of time.

*COMPARANDA*

*Northern Alluvial Plain*

*Abu Qubur* : DE MEYER and GASCHE 1986, fig. 8 : 26.

*Southern Alluvial Plain*

*Larsa* : LOFTUS 1971, fig. on p. 253.
GASCHE in press, Pl. 5 : 119.

*Telloh* : CROS 1910-14, fig. on p. 145.

*Diyala Basin*

*Tell Abqa'* : HROUDA *et al*. 1982, fig. 9.

*Tell Asmar* : *OIP* 63, Pl. 127 : b ; see also Pl. 127 : c (Protoimperial), d to g (Larsa) and h (Unknown) for sherds with spouts placed side by side around the neck.

*Tell ed-Dhiba'i* : AL-GAILANI 1965, Pls. **2** : 25 and **3** : 26-30, all with spouts placed side by side around the neck.

*Tell Genj* : WILSON-BRIGGS *et al*. 1984, Pl. 2 : 2 ; see also Pl. 2 : 1 with spouts placed side by side around the neck.

*Tell Halawa* : besides Pl. 114 : 16-18 illustrated here, see also : GHASSAN 1995, Pl. 48 : A-C, E-F, H-J and O ; see also K to N for spouts placed side by side around the neck.

## Group 255 C (Pl. 115 : 1-3)

As was true for the previous group, there is only one extant whole profile for Group 255 C (Pl. 115 : 3). The group description is virtually identical to that of the preceding Group 255 B, except that the jars of Group 255 C have spouts (or vents) that were at least potentially functional, because the vessel wall under the applied spout was pierced through, creating a channel to the outside.

These channels are usually referred to as spouts (or false spouts in the case of Group 255 B), indicating that they were intended for pouring. We suggest that they may have served to vent steam, as, for example, if the vessel were covered while being used for cooking. Either way, the decorative, as opposed to the functional, alternative seems to have been produced more frequently.

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Group 255 C is attested in southern Babylonia around 1900, at the time of the transition from the Ur III Period to the Isin-Larsa. It is then present in northern Babylonia in the 18th century, that is, during the latter part of the Isin-Larsa Period.

Examples of this group are uncommon, but they show a chronological pattern that is consistent with the better attested Group 255 B. Apparently before the end of the 20th century, potters in the Southern Alluvial Plain began to add both functional and decorative spouts/vents to the shoulders of jars that otherwise would be assigned to Group 255 $A_2$. If the original purpose of this innovation was utilitarian, as seems likely, then the functional examples should have appeared earlier than the decorative, though our evidence is too scanty to show such a temporal sequence. In any case, these forms were being produced in northern Babylonia and its periphery by at least the 19th century and continued to be made until around the end of the 18th century. This suggests that the two spouted groups continued in production long after the original Group 255 $A_2$ stopped being made. It is less clear how long either spouted group continued to be made in southern Babylonia, because there are so few reported finds.

*COMPARANDA*

*Southern Alluvial Plain*

*Larsa* : GASCHE in press, Pl. 5 : 120.

## FAMILY 260

Family 260 consists of very large open vessels, generally with incurved sides, that were built up with coils of clay. There are three groups.

### Group 260 $A_2$ (Pl. 116 : 1 to Pl. 118 : 5)

Group 260 $A_2$ consists of very large open vessels, sometimes referred to as burial jars. They were built up of coils of clay, which were added atop one another, and then pinched together. The vessels tend to be roughly as wide as they are tall, though some are more open, that is to say, wider than their height. There are both ring and flat bases, all of which have been reworked, with the exception of several bases from Susiana and the Diyala that we have included here (Pl. 117 : 5 and 8; and Pl. 118 : 4-5). The stability of some of the vessels was improved by the addition of a supplemental ring of clay with a flat bottom around the edge of the original base resulting in a reworked flat base (Pl. 116 : 1 and 3, Pl. 117 : 1 and 3-4, and Pl. 118 : 1).[246] Multiple horizontal ridges typically surround the slightly incurved or nearly vertical (Pl. 116 : 1 and 5-6, Pl. 117 : 7, and Pl. 118 : 5) body. Rims are augmented with a thick band of clay (e.g., Pl. 116 : 1-3) that is either beveled outward or horizontal (Pl. 116 : 5-6 and Pl. 117 : 4-5). The tops of these rims sometimes have concentric ridges (Pl. 116 : 1 and 4-5). The rims on some later examples from Susiana are vertical bands (Pl. 118 : 4-5).

Vessels of this group are attested from the latter part of the 19th century in the Southern Alluvial Plain. They are found throughout the 18th through 16th centuries in the Northern Alluvial Plain. The Diyala has yielded several 18th- and 17th-century examples. This group was known in Susiana from the 17th through early 16th centuries ; the latest examples show differences in both body and rim shape from the rest of the group, suggesting that over time this group had an increasingly independent developmental trajectory in Susiana. This group is also attested in the Gulf.

The lack of post-19th century attestations in the Southern Alluvial Plain is, we believe, mostly due to accidents of excavation, preservation and recording. These are very large, bulky and relatively fragile vessels that frequently emerge from the ground in fragmentary condition. They are difficult to handle, transport, conserve, store and draw, all factors that have made them less likely than smaller vessels to be adequately recorded in excavations.

*COMPARANDA*

*Northern Alluvial Plain*

*Kish* : DE GENOUILLAC 1924, Pl. IX : 2.
*Id.* 1925, Pl. 55 : 9bis.
LANGDON 1924, Pl. 35 : 3, right.

*Sippar (Abu Habbah)* : AL-JADIR 1987, illustr. 3 (photo).
*Sumer* 54, see Pls. **10**, **11**, **12**, **14**, **16**, **17**, **19** (all from burials) and **57** : 6.

*Tell ed-Dēr* : besides the vessels illustrated here on Pls. 116-118, see also :
*NAPR* 6, probably Pl. 16 : 10.
*MHEM* 1, Pl. 40 : 4.

*Southern Alluvial Plain*

*Larsa* : CALVET *et al.* 2003, fig. 33 : j (convex base).

*Telloh* : DE GENOUILLAC 1936, Pls. **119** : 3 and **124** : 3.

*Gulf*

*Qala'at al-Bahrain* : HØJLUND and ANDERSEN 1994, figs. 270, 271 and 272.

*Susiana*

*Haft Tepe* : MOFIDI-NASRABADI 2011, fig. 3 (used for the cover of a burial).

*Susa* : besides Pls. **117** : 6-8 and **118** : 4-5 illustrated here, see also :
JÉQUIER 1900, fig. 322.

### Groups 260 $B_2$ (Pl. 119 : 1-5) and 260 $C_2$ (Pl. 119 : 6-7)

The vessels of these two groups, which differ from one another only in the shape of their rims, are very large open forms. Their sides curve inward to the rim. The position of the line of maximum diameter on the body differs among the vessels in both groups. A lower maximum diameter is found on several deeper examples (Pl. 119 : 1 and 7) while vessels with higher maximum diameters tend to be shallower and wider (Pl. 119 : 3-4). Horizontal ridging occurs (Pl. 119 : 3-5), but the ridges do not cover the entire body, as they do in Group 260 $A_2$. Small ridges appear as part of the rim or just below it in virtually all examples ; in one case, there is a narrow ledge instead of a ridge (Pl. 119 : 7). The outwardly thickened rims are horizontal in Group 260 $B_2$, and beveled to the exterior in Group 260 $C_2$.

Group 260 $B_2$ is attested in the Northern Alluvial Plain around 1300 and in the Southern Alluvial Plain between the 14th and 11th centuries. Group 260 $C_2$ is found in the Southern Alluvial Plain between the 14th and 11th centuries, and also in the Gulf. These groups represent the descendants of Group 260 $A_2$ in the Kassite and Isin II Periods.

As with Group 260 $A_2$ above, we believe that the relative rarity of examples from these groups is due to accidents of excavation, preservation and recording.

*COMPARANDA*

*Northern Alluvial Plain*

*Tell ed-Dēr* : besides Pl. 119 : 1 and 2 illustrated here (Group 260 $B_2$), see also the fragments :
*NAPR* 6, Pl. 17 : 9, 11 and 12.

*Southern Alluvial Plain*

*Warka* : besides Pl. 119 : 4 illustrated here (Group 260 $B_2$), see also :
*AUWE* 10, Pl. 41 : *Grab* 71 (260 $B_2$ ; = *AUWE* 1, Pl. 48 : 402).

*Gulf*

*Qala'at al-Bahrain* : HØJLUND and ANDERSEN 1997, fig. 171.
KERVRAN *et al.* 1987, probably figs. **8** : 4 and **9** : 7-8 ; bases only (Late Kassite).

246 We believe that this was likely the case with Plate 116 : 6, as well, though it was not recognized when the vessel was drawn.

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## FAMILY 265

Family 265 consists of a one group of large to very large open vessels built up with coils of clay and usually having a hole in the middle of their convex bases.

### Group 265 A 3 (Pl. 120 : 1 to Pl. 124 : 11)

Group 265 A 3 is made up of large to very large open vessels that usually have a hole in the middle of a convex base. Rarely the hole in the base is lacking (Pl. 121 : 3-4). In the earliest examples with preserved bases, from around 1800, the characteristic hole is simply pierced through the base without further elaboration (e.g., Pl. 120 : 1-3). Around 1700, potters in northern Babylonia began to add a small disk of clay to the middle of the base of the vessel, apparently in order to strengthen it against the possibility of cracking and deformation when it was pierced. (Pl. 121 : 1-2). In the Diyala, however, vessels without reinforced holes continued to be common through the 17th century. Southern vessels, the bases of which are attested only in the middle of the 17th century, have reinforced holes (Pl. 122 : 6-7).

These vessels were built up using coils of clay, which were pinched together. The sides of earlier examples in this group often curve up to a neck-like constriction before flaring outward to the rim (e.g., Pl. 120 : 3 and Pl. 121 : 7-8), though there are other examples that simply curve up to the vertical (e.g., Pl. 121 : 1) or turn slightly inward (e.g., Pl. 121 : 3). Potters regularly added multiple horizontal ridges and comb decoration just below the rim. Horizontal ridges were sometimes also added at or below the midpoint of the body during the 17th and 16th centuries in Babylonia (Pl. 122 : 1, 4 and 6-7, and Pl. 123 : 1-4), and in the 15th century in Susiana (Pl. 123 : 5-7).

We see a gradual simplification of the profile and decoration of this group over the course of the 2nd millennium. The few complete examples of Group 265 A 3 from the second half of the millennium bear few decorative features, if any (Pl. 124 : 9-11). Their profiles are also simple, having sides that curve up to the rim without any interruption or elaboration. This is also true for most of the ridged examples from northern Babylonia and its periphery at mid-millennium (Pl. 123 : 1-3 and 5-7). There may be a distinction between the Group 265 A 3 profiles of the 16th century and those of 15th-13th centuries. The lower bodies of some the later examples are distinctly less rounded and more tapered (Pl. 124 : 9-10), though it remains possible that this distinction, if genuine, is geographical instead of chronological, since the strongly tapered examples come from the South.

Several different rim shapes are attested, though thickened and beveled rims predominate. Around 1800 in northern Babylonia beveled rims were thickened both inwardly and outwardly, though thereafter the beveled rims were commonly thickened only to the exterior. As was also true with Group 260 A 2, vertical band rims are found on vessels belonging to Group 265 A 3 produced in Susiana around the middle of the millennium (Pl. 123 : 5-7 ; see Pl. 118 : 4-5).

Group 265 A 3 is attested in the Northern Alluvial Plain from the 20th century through the 16th, then in the 14th and 13th centuries. In the Southern Alluvial Plain, it is attested in the 20th and 17th centuries and the 14th through 13th centuries. Regarding the earliest evidence for this group, we have only rim sherds from the 20th century. Those from Tell ed-Dēr in the North almost certainly belong to this group (Pl. 120 : 5-6). We are less certain about the ones from Nippur in the South, because the rims have somewhat different shapes and all are relatively small (Pl. 120 : 7-10), though a few examples of comparable size are attested elsewhere in the group (Pl. 122 : 2-3 and 6). The latest examples from the North also consist only of sherds. In this case, however, the sherds are bases and show the thickened, reinforced hole characteristic for this group after 1700, so there is no doubt of their attribution. The group is found in both the Middle Euphrates and Diyala regions in the 18th through 16th centuries. It is attested in the Gulf. In Susiana, it is attested around 1800 and again in the 15th century.

As before, we attribute the frustrating spottiness in the record of attestations largely to accidents of excavation, preservation and recording.

*COMPARANDA*

*Northern Alluvial Plain*

*Sippar (Abu Habbah)* : *Sumer* 54, possibly Pl. 45 : 1 (sherd) and Pls. **11**, **14** (all from burials) and **57** : 13.

*Tell ed-Dēr* : besides the vessels illustrated on Pls. 120 to 124, see also :
*NAPR* 6, Pl. 16 : 4 and 8.
*TD* 1, Pl. 25 : 2-10.

*Southern Alluvial Plain*

*Abu Salabikh* : POSTGATE and MOON 1984, 75, figs. 21 and 24.

*Nippur* : besides Pls. **120** : 7-10, **122** : 6-7 and **124** : 9-10 illustrated here, see also :
*OIP* 129, possibly Pl. 95 : 3.

*Telloh* : DE GENOUILLAC 1936, possibly Pl. XXXIII : 803.

*Middle Euphrates*

*Tell al-'Usiyeh* : AGHA 1987-88, 118, illustr. 8.

*Tell Mohasan* : GEYER and MONCHAMBERT 1987, perhaps fig. 12 : 13.

*Terqa* : TASSIGNON 1997, possibly fig. 35 : 8.

*Diyala Basin*

*Tell Genj* : WILSON-BRIGGS *et al*. 1984, Pls. **6** : probably 2 and 4 and **7** : 3 (= GHASSAN 1995, Pl. 145 : 542), 7 (= GHASSAN 1995, Pl. 145 : 541) and probably 2, 4-6.

*Tell Halawa* : GHASSAN 1995, Pl. 34.

*Tell Imlihiye* : BOEHMER and DÄMMER 1985, Pl. 52 : 259 ; base only.

*Tell Owessat* : JAKOB-ROST *et al*. 1983, 121, fig. 24 and Pl. 15 = (?) GHASSAN 1995, Pl. 145 : 540.

*Tell Zubeidi* : BOEHMER and DÄMMER 1985, Pl. 133 : 476-480 ; bases only.

*Gulf*

*Failaka* : HØJLUND 1987, illustr. at bottom of p. 83, right.
PIC 2008, possibly fig. 22 : 143.

*Qala'at al-Bahrain* : HØJLUND and ANDERSEN 1997, fig. 172 ; similar to our Pl. 124 : 3.

*Susiana*

*Chogha Pahn* : *IVth Annual Symp., Tehran*, 1976, fig. 4 : i.

*Susa* : besides Pls. **120** : 11, **123** : 5-7 and **124** : 11 illustrated here, see also :
DE MECQUENEM 1934, fig. 76 : 5.
DE MIROSCHEDJI 1981, figs. **10** : 17, 19 (late 14th-early 13th century) and **15** : 4, 6-7, 9-10 and 12-13 (late 13th-11th c.).
*MDP* 47, Pl. 44 : 6.

## FAMILY 270

This family contains large ovoid jars with necks ; most groups have convex bases, although members of Group 270 A 2 have ring bases. The neck and rim of the vessels of this family from Tell ed-Dēr were thrown on the wheel and then joined together with the body, which was built up with coils.

### Group 270 A 2 (Pl. 125 : 1 to Pl. 126 : 6)

Group 270 A 2 comprises large jars having ovoid bodies. The maximum diameter is generally at or above the middle of the body. The whole profiles in this group have ring bases ; it is possible, however, that among the incomplete profiles are examples with convex bases (see Group 270 A 3 below). Rounded shoulders, which sometimes are set off from the body (Pl. 125 : 4-5), occasionally bear rope decoration (Pl. 125 : 4-5) or horizontal combing (e.g., Pl. 125 : 1-3). Necks tend to be more-or-less vertical or inward leaning (Pl. 125 : 1 and Pl. 126 : 3-4). Rims are outwardly thickened and slightly beveled or horizontal (Pl. 126 : 3).

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This group is attested in the Northern Alluvial Plain from the 18th through 16th centuries, that is, from the Late Isin-Larsa through Late Old Babylonian Periods.

*COMPARANDA*

*Northern Alluvial Plain*

*Tell ed-Dēr* : besides the vessels illustrated on Pls. **125** and **126** : 1-6, see also :
*TD* 1, Pl. 23 : 2-3.
*MHEM* 1, Pl. 39 : 14.

## Group 270 A$_3$ (Pl. 126 : 7)

The description of this small group is similar to that of Group 270 A$_2$ above, except that it has a convex base. The illustrated example also has a more slender profile and a flaring neck. It comes from Tell ed-Dēr in northern Babylonia and dates to the 17th century.

## Group 270 B$_3$ (Pl. 127 : 1-3 and Pl. 128 : 1-2)

This group consists of slender ovoid jars with a high maximum body diameter. Their lower bodies taper slightly to a convex base. Rounded shoulders are sometimes horizontally incised or combed (Pl. 127 : 1 and 3). Necks are vertical to outwardly flaring and terminate in band rims.

Group 270 B$_3$ is found only in southern Babylonia in the 18th and 17th centuries. It represents part of the later development of the Group 270 C$_3$ (below) in the South. By the 18th century, southern potters were producing the jars of Group 270 B$_3$ with a more slender and tapered shape than the jars of Group 270 C$_3$. Because of these shape characteristics, we have given these later jars their own group number. The line of separation between our two groups interrupts what may otherwise be interpreted as a continuum of shapes.

*COMPARANDA*

*Southern Alluvial Plain*

*Larsa* : besides Pl. 128 : 1-2 illustrated here, see also :
CALVET 2003, fig. 55 : 27.510.
For necks of 270 B, C or D, see CALVET *et al*. 2003, figs. 29 and 30.

## Group 270 C$_3$ (Pl. 127 : 4-10 and Pl. 128 : 3-12)

The large ovoid jars in Group 270 C$_3$ have wider bodies than the jars in Group 270 B$_3$. Bases are convex. The maximum body diameter for most examples is around or just above the middle of the body, resulting in generally lower, less pronounced shoulders, though there are several high-shouldered exceptions, all from Warka in southern Babylonia (Pl. 127 : 4-5 and 9). Necks are vertical or flare outward and terminate in band rims. Some jars from the Northern Alluvial Plain have significantly longer band rims than is typical for the rest of the group (Pl. 128 : 5, 7 and 9).

Group 270 C$_3$ is first attested in the Southern Alluvial Plain around the end of the 20th century (the end of the Ur III Period) and continues through the 17th century. In the Northern Alluvial Plain, it first is attested at the beginning of the 17th century. It continues to be produced in the early 16th century, but apparently in lower numbers than before. This group is also found in the Diyala Basin shortly before 1700. In the Middle Euphrates, at Mari, for example, the group could be present around 1700 BC, but the neck of the few sherds that we know is shorter, close to our Pl. 128 : 9, and it is always separated from the shoulder by a single horizontal ridge.[247] The group is also attested in the Gulf.

As we have already noted, the more slender jars of Group 270 B$_3$ represent a further development of this group during the 18th and 17th centuries in the South.

[247] LEBEAU 1987, Pl. 4 : 19 and PONS 1999a, Pl. 83 : 2-4.

*COMPARANDA*

*Northern Alluvial Plain*

*Kish* : LANGDON 1924, Pl. 32 : 1 and 3.
*Tell ed-Dēr* : besides the vessels illustrated on Pls. 127 and 128, see also :
*TD* 1, Pl. 22 : 4-7.
*TD* 2, Pl. 24 : 1.

*Southern Alluvial Plain*

*Isin* : *Isin* 3, Pl. 26 : 7.
*Nippur* : besides Pls. **127** : 10 and **128** : 11 illustrated here, see also :
FRANKE 1978, fig. 61 : 1.
*Larsa* : CALVET 2003, figs. **50** : 27.53, **53** : 27.128 (= Pl. 34 : a) and **56** : 27.520.
CALVET et al. 2003, fig. 33 : I (Exc. Parrot 1967).
For necks of 270 B, C or D, see CALVET *et al*. 2003, figs. 29 and 30.
GASCHE in press, Pl. 5 : 121-125, sherds that probably belong to Group 270 C$_3$.
*Ur* : HALL 1930, 182, fig. 143 : second and third vessels from left.
WOOLLEY and MALLOWAN 1976, types **51a**, **51b**, **52** and **53**.
*Warka* : besides Pls. **127** : 4-6, 9 and **128** : 10 illustrated here, see also :
*AUWE* 10, Pls. **18** : b (photo) and **19** : a (photo).

*Diyala Basin*

*Tell Madhhur* : MOON and ROAF 1984, fig. 11 : 7-9.

*Gulf*

*Failaka* : HØJLUND 1987, 56, type 54A.

## Group 270 D$_3$ (Pl. 128 : 13-14)

Group 270 D$_3$ represents a variant shape of the large ovoid jar of Group 270 C$_3$ ; it is distinguished by a slender body with relatively low maximum diameter. Shoulders are low ; one example has a narrow ledge at the base of neck (Pl. 128 : 14). Vertical to outward-flaring necks terminate in band rims. This group of slender jars is attested in the Southern Alluvial Plain in the 17th century.

*COMPARANDA*

*Southern Alluvial Plain*

*Larsa* : For necks of 270 B, C or D, see CALVET *et al*. 2003, figs. 29 and 30.

## Group 270 E$_3$ (Pl. 129 : 1-17)

Group 270 E$_3$ includes large ovoid jars with convex bases. Their maximum body diameters are above the middle of the body. The rounded shoulders are sometimes decorated with horizontal combing. One example has cross-hatched triangles (Pl. 129 : 6). Necks are vertical or flare outward. Rims are outwardly thickened and rounded or outwardly beveled (that is, triangular in section).

Group 270 E$_3$ is found in the Southern Alluvial Plain beginning in the 20th century (Ur III Period). It continued to be produced until around 1800. This was an important and widespread southern Babylonian form, found at Nippur and nearby Umm al-Hafriyat, as well as farther south at Warka and al-Hiba (Lagaš). A single rim sherd represents the production of this group in northern Babylonia in the 20th century. Though it is only sparsely attested in the North, this may have also been the principal store jar for northern Babylonia early in the 2nd millennium.[248] An example found in the Diyala can be dated to around 1800. It is also attested at Susa in Susiana.

*COMPARANDA*

*Southern Alluvial Plain*

*Abu Salabikh* : POSTGATE and MOON 1984, 79, figs. 50 and 51. >

[248] One reason for the limited attestation of this group in northern Babylonia is that the relevant levels have been exposed only at Tell ed-Dēr, and that exposure was relatively small.

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*al-Hiba* : CARTER 1989-90, fig. 3 : 1.
*Fara* : MARTIN 1983, fig. 2 : 6.
*Mashkan-shapir* : STONE 1995, fig. 4 : left.
STONE and ZIMANSKY 2004, fig. 50 : AbD 87-205.
*Nippur* : besides the jars from Nippur illustrated here on Pl. 129, see also :
*OIP* 78, Pl. 87 : 3 and 10 (tall).
*Warka* : besides Pl. 129 : 6 and 10-11 illustrated here, see also :
*AUWE* 10, Pl. 16 : i.
VAN ESS 1993, figs. **11** : 156, **12** : 158 and **13** : 162.
*Ur* : WOOLLEY and MALLOWAN 1976, types **54a** and **54b**.

*Diyala Basin*

*Tell Haddad* : BURHAN SHAKIR SULAIMAN 2003-04, 110, fig. 13 : 161.
*Tell Imlihiye* : BOEHMER and DÄMMER 1985, 18, Pl. 54 : 283. Burial 16, most probably from Isin-Larsa period ; neck is missing but the body fits well in Group 270 $E_3$. See also Pl. 54 : 284 (cup from the same burial) mentioned in the *Comparanda* of Group 65 $C_1$.
*Tell Songor A* : KAMADA and OHTSU 1981, fig. 38 : 12-13.
KAMADA and OHTSU 1988, figs. **12**, **13** and **14** : P.10-P.12.
*Tell Songor B* : MATSUMOTO 1981. fig. 50 : 13

*Susiana*

*Susa* : *MDP* 46, Pl. 2 : 26.

## Group 270 $F_3$ (Pl. 129 : 18-21)

Group 270 $F_3$ represents a variant of Group 270 $E_3$ that is distinguished by the shape of its rim. The rim was stretched out horizontally, or elongated, from top of the neck and then rounded off. Most examples in this group come from Nippur and Warka in the Southern Alluvial Plain and date to the 20th century (Ur III Period). Three rim sherds like the one published here as Pl. 129 : 18, also dating to the 20th century, come from Tell ed-Dēr in northern Babylonia.[249]

The elongated rims of Group 270 $F_3$ are best seen as one end of a morphological continuum with the rims of Group 270 $E_3$. Some of the rims of Group 270 $E_3$ are close to the limit between the two groups (e.g., Pl. 129 : 7-8 and 11). Based on present evidence, Babylonian potters produced the elongated rims only in the 20th century (see also the elongated rims of another 20th-century group, Group 240 $C_{2\&3}$ [Pl. 109 :3-8]). Potters stopped elongating the rims around the end of the 20th century, and that marks the end of our Group 270 $F_3$. Thereafter, only Group 270 $E_3$ continued in production with rims that generally were outwardly beveled.

*COMPARANDA*

*Southern Alluvial Plain*

*Warka* : besides Pl. 129 : 20 illustrated here, see also :
VAN ESS 1993, figs. **11** : 153, **12** : 157, 159-160 and **13** : 163.

## Group 270 $G_3$ (Pl. 130 : 1-14)

Group 270 $G_3$ includes large, relatively wide ovoid jars. The line of maximum body diameter can be somewhat above (e.g., Pl. 130 : 11) or below (e.g., Pl. 130 : 5) the middle of the body. Bases, where extant, are convex. Shoulders occasionally bear horizontal combed or incised lines. Jars from northern Babylonia, all from Tell ed-Dēr, have necks that tend to lean inward ; examples from southern Babylonia, the Diyala and Susiana have necks that are more vertical. Almost all the rims are outwardly thickened and beveled ; Plate 130 : 4 and 6 display rims that are outwardly thickened and rounded.

Most members from this group have been found at Tell ed-Dēr in the Northern Alluvial Plain. They date between 1700 and the mid-16th century, and so generally belong to the Old Babylonian Period. A single example from Nippur in the South dates to the middle of the 17th century. The Diyala has yielded jars from the early 16th century, while from Susiana comes an example dated to the late 16th century. The group is also attested in the Gulf.

*COMPARANDA*

*Northern Alluvial Plain*

*Babylon* : REUTHER 1926, 8, fig. 1 : c.
*Tell ed-Dēr* : besides the vessels illustrated on Pl. 130, see also :
*MHEM* 1, Pl. 39 : 6, 7 and 9-11.

*Southern Alluvial Plain*

*Isin* : *Isin* 3, Pl. 30 : 1.
*Larsa* : CALVET 2003, figs. **53** : 27.161 (= Pls. **20** : a-b and **34** : b), probably also **56** : 27.553 with a larger rim diameter (223 mm), **58** : 27.547 with geometric design on exterior in dark paint, and **62** : 59.1 without neck.

*Gulf*

*Failaka* : CALVET 1984, 61, fig. 27 : 65, p. 63, fig. 28 : 69 and p. 67, fig. 30 : 89.
HØJLUND 1987, 56-58, type 54B.

## Group 270 $H_3$ (Pl. 131 : 1-2 and Pl. 132 : 1-5)

Group 270 $H_3$ represents the subsequent evolution of the jars of Group 270 $G_3$. These jars generally have a maximum body diameter below the mid-point of the body. As a result they have a saggy, bottom-heavy appearance, particularly when compared with the earlier group. A wide-bodied example from Susiana dated to the late 16th century, from the period when evidence from Babylonia is lacking, provides evidence of the morphological transition from one group to the other (Pl. 131 : 2). Shoulders are usually marked by a narrow ledge. Necks are short and more-or-less vertical, terminating in outwardly beveled and thickened rims.

The earliest examples come from the peripheral region of Susiana. They date from the end of the 16th century to the beginning of the 14th century, including the period when Babylonian material is largely absent. The group is attested in northern Babylonia in the latter half of the 14th century, in southern Babylonia around 1300, and then in the Diyala toward the end of the 13th century. The group is also attested in the Gulf.

Groups 270 $H_3$ and 270 $J_3$ together with their respective variants, Groups 270 $I_3$ and 270 $K_3$, represent the standard store jars used during the Kassite Period.

*COMPARANDA*

*Northern Alluvial Plain*

*Tell ed-Dēr* : besides Pl. 132 : 1-2 illustrated here, see also :
*NAPR* 6, Pl. 18 : 4-5 and perhaps 6.

*Southern Alluvial Plain*

*Nippur* : besides Pl. 132 : 3 illustrated here, see also :
FRANKE 1978, fig. 67 : 1, 7-8.
*OIP* 111, Pl. 82 : e-j.
*Warka* : *AUWE* 1, Pl. 49 : 409-432 (sherds).
FINKBEINER 1985, fig. 20 : 41.

*Diyala Basin*

*Ahmed al-Mughir* : ARMSTRONG 1981, Pl. 112 : 22.
*Tell Imlihiye* : BOEHMER and DÄMMER 1985, Pls. **42** : 158 and **44** : 181 (drawings) and **56** : 181 (photo).

*Gulf*

*Failaka* : possibly CALVET 1984, 65, fig. 29 : 81.
HØJLUND 1987, figs. 224 and 228-229.
*Khor Ile-Sud* : EDENS 1999, fig. 5 (Late Kassite).
*Qala'at al-Bahrain* : HØJLUND and ANDERSEN 1997, probably fig. 167 ; upper shoulder, neck and rim.
KERVRAN *et al.* 1987, probably fig. 7 : 4-6 (Late Kassite).

*Susiana*

*Tchogha Zanbil* : *MDP* 40, Pl. 95 : G.T.-Z. 1058, right.

249 Footnote 248 applies here, as well.

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## Group 270 $I_3$ (Pl. 131 : 3-4 and Pl. 132 : 6-7)

Group 270 $I_3$ includes large wide-bodied ovoid jars generally with maximum body diameters low on the body, giving them a bottom-heavy appearance. They have convex bases, and they have outwardly thickened and beveled rims. They are distinguished from the preceding Group 270 $H_3$ by the lack of a well-defined neck, although the similarity between the profiles of Plate 132 : 2 (Group 270 $H_3$) and Plate 132 : 6 (Group 270 $I_3$) suggests that we are dealing with a morphological continuum.

Group 270 $I_3$ has a pattern of chronological and geographic attestation consistent with that of Group 270 $H_3$, given that neither group is well attested. Examples from the Northern Alluvial Plain date to the early 16th century and the latter half of the 14th century. A very large example from southern Babylonia, which served as a burial jar, dates to around 1300. A link between the earlier and later Babylonian examples is provided by a jar from Susiana, dated to the early 15th century.

*COMPARANDA*

*Southern Alluvial Plain*

*Warka* : *AUWE* 1, Pl. 49 : 403-408 (sherds).

## Group 270 $J_3$ (Pl. 133 : 1-5)

Group 270 $J_3$ includes large ovoid jars with maximum diameters around the middle of the body. Bases are convex. Necks are vertical or flare outward. The examples from the Northern Alluvial Plain have necks of moderate height, while those illustrated from the South have very short necks (Pl. 133 : 5) or no neck to speak of (Pl. 133 : 4). However, remarks in the original publication of the example from Nippur shown in our Plate 133 : 5 (= *OIP* 78, Pl. 99 : 7) make it clear that that illustration represented jars both with and without moderately tall necks from the same context.[250] Shoulders bear one or more horizontal incisions. Rims have two or three ridges.

This group is attested in the 14th century in northern Babylonia and in both the 14th and 13th centuries in southern Babylonia.[251] The group is also attested in the Diyala Basin, in the Gulf and in Western Iran. Rim sherds possibly belonging to jars of this group (or Group 270 $K_3$) have been found at Assur in the Middle Tigris Basin.

Despite the limited number of complete profiles, most of which have survived in burials or as segments of drains, abundant sherd evidence shows that Groups 270 $J_3$ and 270 $H_3$ (with their respective variants, Groups 270 $K_3$ and 270 $I_3$) together represent the most common large jars of the Kassite Period.[252]

*COMPARANDA*

*Northern Alluvial Plain*

*Tell ed-Dēr* : besides Pl. 133 : 1 to 3 illustrated here, see also : *NAPR* 6, Pl. 18 : 8 and 11 to 15.

*Southern Alluvial Plain*

*Nippur* : besides Pl. 133 : 4-5 illustrated here, see also : FRANKE 1978, fig. 67 : 2, 5 and 6. *OIP* 111, Pl. 83 : a, c-d and g-h.

*Warka* : *AUWE* 1, Pl. 50 : 433-451 (sherds, Groups 270 $J_3$ and 270 $K_3$).

*Larsa* : GASCHE in press, Pl. 5 : 126, sherd that probably belongs to Group 270 $J_3$.

*Middle Tigris Basin*

*Assur* : BEUGER 2005, Katalog 2, Pls. **64** : 2a-2b and **69** : 9a-9b and 10 (rim sherds).

*Diyala Basin*

*Ahmed al-Mughir* : ARMSTRONG 1981, Pl. 114 : 52-53.

*Tell Ajamat* : ARMSTRONG 1981, Pls. **115** : 66-68, 70-74, 76, 78-80 and **116** : 37-38.

*Tell ed-Dhiba'i* : MOHAMMAD ALI MUSTAFA 1949, Pl. IV : 13.

*Tell Imlihiye* : BOEHMER and DÄMMER 1985, Pl. 47 : 194 and 197-199 (rim-sherds with 2 ridges, probably of Groups 270 $J_3$ or 270 $K_3$).

*Tell Zubeidi* : BOEHMER and DÄMMER 1985, Pl. 126 : 296 (rim/shoulder-sherd with 2 ridges) ; see also Pls. **108** : 58-62 and **126** : 298, 300-301 (rim-sherds with 2 ridges, probably of Groups 270 $J_3$ or 270 $K_3$). *Ib.*, Pl. 108 : 66-69 (rim-sherds with 3 ridges, probably of Groups 270 $J_3$ or 270 $K_3$).

*Gulf*

*Bahrain Cemeteries* : DENTON 1999, fig. 11 ; rim with 3 ridges.

*Barbar (Bahrain)* : ANDERSEN and HØJLUND 2003, figs. 590-593 ; more or less short necks and rims with 3 ridges.

*Failaka* : HØJLUND 1987, 58-59, types 55A and B. See also pp. 60-61, types 55C and D, and pp. 61-63, type 56 with its triple-ribbed rim.
PIC 2008, fig. 14 : 63, probably 64 (double-ridge rims) ; probably also fig. 16 : 87 (triple-ridge rim).

*Qala'at al-Bahrain* : HØJLUND and ANDERSEN 1997, figs. 136, 168 and, probably, 233-236 ; more or less short necks and rims with 3 ridges.

*Western Iran*

*Tepe Guran* : THRANE 2001, probably Pls. 32 : 4 (double-ridge rim with a diameter of 138 mm).

## Group 270 $K_3$ (Pl. 133 : 6-11)

Group 270 $K_3$ is a slender variant of Group 270 $J_3$. The examples shown in Plate 133 : 8 (Group 270 $K_3$) and Pl. 133 : 4 (Group 270 $J_3$), which are close in shape, demonstrate the morphological continuum between the two groups. Examples with moderately tall necks (Pl. 133 : 9-10) and without (Pl. 133 : 6-8 and 11) are attested. The two latest examples shown from Tell Zubeidi in the Upper Diyala (late 13th-12th c. ; Pl. 133 : 9-10) are significantly larger and taller than the rest.

This group of slender jars is found in both the Northern and Southern Alluvial Plains in the 13th century and also appears in the Diyala in the 13th and 12th centuries. It is attested in the Gulf, as well.

Despite several sherds found at Tell Bderi and Tell Barri in the Habur Basin (see *Comparanda*), the ridged-rim storage jars of Groups 270 $J_3$ and 270 $K_3$ are not commonly attested in northern Mesopotamia. On present evidence, these are essentially southern Mesopotamian groups. We wonder whether ridged-rim storage jars found their way to Tell Bderi and Tell Barri through commerce. At this time Babylonians using Babylonian pottery were settled along the Middle Euphrates as far north as the region of Mari and Terqa,[253] and trade along the Habur River would not be unexpected.

*COMPARANDA*

*Southern Alluvial Plain*

*Nippur* : besides Pl. 133 : 7-8 illustrated here, see also : FRANKE 1978, fig. 67 : 4. *OIP* 111, Pl. 83 : b.

*Warka* : *AUWE* 1, Pl. 50 : 433-451 (sherds, Groups 270 $J_3$ and 270 $K_3$).

*Larsa* : GASCHE in press, Pl. 5 : 127, sherd that probably belongs to Group 270 $K_3$.

*Habur Basin*

*Tell Barri* : PFÄLZNER 1995, Pl. 177 : c.

*Tell Bderi* : PFÄLZNER 1995, Pls. **155** : c and **156** : e. >

250 See the Remarks referring to *OIP* 78, Pl. 99 : 7 : "...[there were] seven such jars (d. rim 10.0-16.0 [cm]) from TA VII, [and] six with [the] same type of rim (d. 12.0-16.5 [cm]) but with moderately tall neck from TA VII."

251 *OIP* 78, Pl. 96 : 12, which looks like a member of our Group 270 $J_3$, is said to be from a 17th-century context (Nippur TA 173 X 1). We wonder if it is not, in fact, a vessel of the Kassite Period that has been misattributed. It does not look like a 17th-century storage jar.

252 MINSAER 1991a, 45 and Pl. 18 : 1-15 ; and *OIP* 111, 72, 79, Pl. 82e-j and Pl. 83a-h.

253 PONS and GASCHE 1996.

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*Diyala Basin*

*Tell Imlihiye* : BOEHMER and DÄMMER 1985, Pl. 47 : 194 and 197-199 (rim-sherds of Groups 270 K 3 or 270 J 3).

*Tell Zubeidi* : besides Pl. 133 : 9-11 illustrated here, see also : BOEHMER and DÄMMER 1985, Pl. 126 : 302-303 (rim/neck-sherds with 2 ridges) ; see also Pls. **108** : 58-62 and **126** : 298, 300-301 (rim-sherds with 2 ridges, probably of Groups 270 J 3 or 270 K 3).
*Ib.*, Pl. 108 : 66-69 (rim-sherds with 3 ridges, probably of Groups 270 J 3 or 270 K 3).

*Gulf*

*Qala'at al-Bahrain* : HØJLUND and ANDERSEN 1997, fig. 160 ; rims with 2 ridges.

## FAMILY 275

Family 275 consists of very large ovoid jars with convex bases. The neck and rim of Plates 134 and 135 : 1-2 were thrown on the wheel and then joined together with the body, which was built up with coils.

### Group 275 A 3 (Pl. 134 : 1 to Pl. 135 : 2)

This group of very large ovoid jars has high maximum body diameters. Bases, where preserved, are convex. Shoulders are often set off from the body with rope decoration (e.g., Pl. 134 : 1 and 7). Incised decoration, including wavy lines (e.g., Pl. 134 : 5), sometimes appears just below the neck. The necks, short and of medium height, are generally vertical and terminate in outwardly thickened and beveled (triangular) rims. The thickened and horizontal rim of Plate 135 : 2 is exceptional.

Group 275 A 3 is attested only in the Northern Alluvial Plain. Most examples are dated to the 18th century (Late Isin-Larsa Period). Fewer come from 17th- and 16th-century contexts.

*COMPARANDA*

*Northern Alluvial Plain*

*Tell ed-Dēr* : besides the vessels illustrated on Pls. **134** and **135** : 1-2, see also :
*MHEM* 1, Pl. 39 : 16.

### Group 275 B 3 (Pl. 135 : 3-4)

Group 275 B 3 includes very large ovoid jars with maximum body diameters around the middle of the body. One example has horizontal ridges on the lower body (Pl. 135 : 3).

This group does not cohere well, due to a lack of examples. Of the two shown on Plate 135, the one from the Southern Alluvial Plain can be dated to the 17th century (Old Babylonian Period), while the one from the Northern Alluvial Plain dates to the 13th century (Late Kassite Period). For Plate 135 : 4, an Old Babylonian example from Nippur, Area TA Level X, the excavators reported that similar rims were "fairly common" in Area TA Levels XII-X, that is between the later 19th and 17th centuries NLC (Isin-Larsa and Old Babylonian Periods).[254]

## FAMILY 280

Family 280 consists of two groups of large and very large globular jars with convex bases. The neck and rim of Plate 136 : 1 were thrown on the wheel and then joined together with the body, which was built up with coils.

### Groups 280 A 3 (Pl. 136 : 1-3) and 280 B 3 (Pl. 136 : 4-5)

These two groups of large and very large more-or-less globular jars with convex bases differ from one another only by the shapes of their rims. The two groups include vessels of nearly globular shape. The lower bodies of the two largest examples with complete profiles were compressed and deformed before firing because of the vessels' weight (Pl. 136 : 1 and 5). Necks flare outward from the shoulder. The necks of Group 280 A 3 bear multiple ridges and terminate in a simple rounded rim ; the necks of Group 280 B 3 terminate in a thickened rim with a small ridge immediately beneath.

Both groups are spottily attested between the 20th and 17th centuries (Ur III, Isin-Larsa and Old Babylonian Periods). We believe that these huge vessels are under-reported in excavations due to their unwieldy and fragile nature. Group 280 A 3 has been found in southern Babylonia in the 20th century, in the Diyala in the 18th century and in northern Babylonia in the 17th century, but this last jar (Pl. 136 : 1), buried in the floor of a 17th-century courtyard for collecting rain water, could have originated in an earlier level and been reused. Examples of Group 280 B 3 dating to the 20th and 17th centuries come from Nippur in the Southern Alluvial Plain. These vessels are also attested in the Diyala Basin and the Gulf.

*COMPARANDA*

*Diyala Basin*

*Tell Muhammad* : AMEL METAB 1989-90, 149, fig. 7 : 3.

*Gulf*

*Qala'at al-Bahrain* : HØJLUND and ANDERSEN 1994, probably figs. 248-249.
LARSEN 1983, fig. 45.

254 *OIP* 78, Pl. 97 : 1, Remarks.

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# THE BABYLONIAN POTTER
## ENVIRONMENT, CLAY AND TECHNIQUES

by
Abraham Van As and Loe Jacobs

## INTRODUCTION

At the request of the late Léon De Meyer and Hermann Gasche (University of Ghent, Belgian Archaeological Expedition to Iraq) a small collection of the most frequently occurring second-millennium BC pottery shapes, the beakers and bowls, from Tell ed-Dēr was studied in order to try to reconstruct the manufacturing process of this pottery. To a certain extent this study, executed at the Department of Pottery Technology at Leiden University, resulted in an explanation of features, such as the peculiar shape of the beakers and their extraordinarily narrow bases.[255] In order to find these explanations, the relationship was shown between the nature of the raw materials used by the potters of Tell ed-Dēr and the shapes that they produced. Only those properties of the raw materials that are relevant for the potter's craft were looked at. The results of this study stimulated further technological research into the pottery of Tell ed-Dēr on a larger scale. In 1985 preliminary results of this expanded research program were published.[256] At the same time, on the initiative of Hermann Gasche, the Working Group on Mesopotamian Pottery was set up.[257] The objective of the members of the Working Group was the preparation of a "regional corpus of ceramic shapes arranged according to the two axes of space and time".[258] Such a morphological pottery corpus is not uncommon in archaeological literature.[259] However, the corpus of pottery of Babylonia and neighbouring regions envisaged by the Working Group involved more than a reference system of pottery shapes for dating and comparative purposes alone. The aim was a general study not only of the gradual evolution in the shapes of vessels, but also in the techniques used in their manufacture. We believed that a technological analysis of the pottery would elucidate the influence that the workability properties of the raw materials and the potters' forming techniques had on the various shapes found in the ceramic repertoire.

The present chapter is focused on the work of the Babylonian potter in the second millennium BC (historically covering the Ur III through Isin II Periods). In contrast with the Ur III Period we do not have much textual evidence of the potter's craft during the rest of the second millennium BC.[260] We also have little direct evidence from excavated pottery workshops and/or kilns. The conclusions of our study are based on technological research.[261] Attention will be paid to the role of environmental conditions in the execution of the craft of the potter, the clay he used and the techniques he applied. This study comprises a report of the technological aspects of the second-millennium pottery of a number of archaeological sites situated in the Northern and Southern Mesopotamian Alluvial Plain in present-day Iraq (particularly Tell ed-Dēr, Nippur, Sippar, and Isin) and some other sites in adjacent regions (see 1.). It includes an analysis of the raw materials used by the potters (see 2.) and the reconstruction of the pottery production sequence or *chaîne opératoire* (i.e. the preparation of the natural clay into a clay body used by the potter, the forming and decoration technique, and drying and firing conditions), introduced by some general remarks on these topics (see 3.).[262] Next, the data and observations on which the evidence for the raw materials and production sequence is based will briefly be presented and illustrated in a separate section (see 4.). Our experiences during two short visits to the present-day potters and brick workers northeast of Baghdad will be embodied in an ethnoarchaeological note (see 5.). Prior to our conclusions (see 7.), we will focus on the relationship between the form of a vessel and related aspects, such as function, use and technique. At the same time, attention will be paid to the implications of these aspects for archaeological ceramic classification (see 6.).

## 1. MATERIAL AND METHODS

The second-millennium Mesopotamian pottery repertoire discussed in this technological study consists of open shapes (trays or platters and bowls) and closed shapes (goblets, cups, large high beakers, jars and globular pots). The research work deals especially with the pottery shapes that were the most commonly produced.[263] Of these the goblet is the most frequently and widely attested shape in the whole of the second-millennium Babylonian ceramic repertoire.[264] The second-millennium pottery repertoire also includes less frequently occurring pottery shapes such as large vessels, miniatures and miscellaneous forms (ceramics that are not vessels as such, e.g., drains, strainers, lids, firedogs and coffins).[265] The technological analysis of the pottery was carried out in the period 1985-1989 during excavation campaigns in Iraq (Tell ed-Dēr[266], Sippar[267], Nippur[268], and Isin[269]). Furthermore, two pottery collections from Nippur were analyzed at the Oriental Institute in Chicago and at the Dickson Mounds Museum in Lewistown, Illinois (U.S.A.). The pottery from older excavations at Telloh, Larsa, Susa and Tchoga Zanbil, now stored in the Louvre, was analyzed in Paris. The pottery

255 FRANKEN and KALSBEEK 1984.

256 VAN AS and JACOBS 1985.

257 VAN AS and TUNCA 1986.

258 *MHEM* 4, 5.

259 E.g., DELOUGAZ 1952 ; DUNCAN 1930 ; PETRIE 1891.

260 SALLABERGER 1996, 37-38.

261 We would like to thank the following persons for their advice and cooperation without which this study would not have been possible : J.A. Armstrong, S. Fitz, J. Franke, H.J. Franken, H. Gasche, T. Grotenmulder, McG. Gibson, B. Hrouda, W. al Jadir, L. De Meyer, K. Minsaer, M. Murshed, R. Nijs, N. Pons, G. Schneider, F. Tallon, and C. Wolff.

262 For more detailed information on the technical aspects of the potter's craft, see HAMER 1975 ; HODGES 1989, 19-41 ; RICE 1987 ; RYE 1981 ; SINOPOLI 1991, 9-42 ; WOODY 1976.

263 *MHEM* 4, 13 ; MINSAER 1991a.

264 *MHEM* 4, 26.

265 FRANKE 1987, 144.

266 Belgian Archaeological Expedition to Iraq.

267 Sippar Expedition, University of Baghdad.

268 Nippur Expedition, Oriental Institute, Chicago.

269 Isin Expedition, University of Munich.

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repertoire has been technologically analyzed without making prior assumptions about the chronology during the second millennium BC.[270]

The Leiden technological research is focused on a theory of pottery typology, the linkage of laboratory analysis with production studies, and the use of ethnographic and ethnoarchaeological observation.[271] The research program covers the study of pottery and potsherds, the analysis of clay samples, and ceramic ethnoarchaeological research.[272]

The analysis of the pottery includes the reconstruction of the manufacturing technique (forming and firing) and the analysis of raw materials used by the potters (fabric analysis). The reconstruction of the forming technique is based on the observation and interpretation of the traces left by the potters (Fig. 21). Some features of the forming technique may have been erased by later operations during the forming process. In those cases, the forming technique can sometimes be inferred from clues that are hidden in the shape and size of the pottery and the material used to produce the pottery. The colors of the surface and core of pottery seen on a fresh break indicate the original firing atmosphere of a vessel.[273] The original firing temperature is determined by measuring the porosity and shrinkage behavior of vessel fragments as found in the soil and measuring them again after refiring at increasingly higher temperatures.[274]

In this way insight was gained into the behavior of the color of this pottery when it was subjected to high temperatures. The reconstruction of the manufacturing technique is usually followed by simulation experiments (experimental archaeology) (Fig. 22). For these we need clay with approximately the same workability properties as the clay used by the potters in the past. If we assume that the pottery was locally made, clay samples should be taken in the direct surroundings of the archaeological site where the pottery was excavated (Fig. 23). If a simulation experiment isolates the variations and problems involved, we may assume that the results of the reconstruction are highly reliable. The clay samples are also used as a means to determine the production location of pottery (provenance studies). If the composition of the clay samples taken close to the site where the pottery was excavated matches with the fabric of the pottery we may reasonably conclude that the pottery was made locally.

Fig. 21. Reconstruction of the forming techniques : observation and interpretation of the traces left by the potters.

Fig. 22. Simulation experiments : goblets made of clay taken in the surroundings of Tell ed-Dēr.

The low-tech fabric analysis concerns the microscopic analysis of the mineral inclusions and pores in the clay body. It needs minimal equipment, is cheap and can be executed in the field. The results of the low-tech analysis form the basis for the selection of samples for mineralogical thin-section analysis and for more costly high-tech analyses. The high-tech analyses of the Mesopotamian pottery were executed in the Kamerling Onnes Laboratory in Leiden (microprobe analysis) and the Institute for Inorganic and Analytical Chemistry in Berlin (XRF analysis) (see 4.1.).[275]

Fig. 23. Taking clay samples.

## 2. THE RAW MATERIALS

The basic material for the production of pottery is naturally occurring clay (natural clay).[276] It is a heavy, damp, plastic material that 'sets' upon drying and can be changed by heat into a hard waterproof material. The clay mixture used by the potters contains a high proportion of clay minerals causing its plasticity. The remainder includes non-plastic minerals and plant remains.

Genetically, the clay mineral is a sedimentary rock, which originates from the chemical disintegration of a mother rock. As a result of the different types of mother rock and varying conditions during this process different clay minerals can be distinguished, such as kaolinite, montmorillonite (smectite), illite etc. Each of these clay minerals has its own specific characteristics in terms of structure and chemical composition. The chemical and

270 See *MHEM* 4.
271 LONEY 2000, 652.
272 VAN AS 2004, 12-14.
273 On the color of ceramic materials, see RICE 1987, 33-34.
274 For this method see HULTHÉN 1976 ; for firing temperature determinations in general, see TITE 1995.
275 For high-tech analysis techniques see HENDERSON 2000.
276 For a full discussion of the various aspects of clay see HAMER 1975, 58-65.

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physical features of the clay mineral make it possible to form the clay and fire it into ceramic vessels. Concerning the chemistry, clay is a hydrated aluminum silicate belonging to the so-called phylosilicates, which as a rule contain chemically bound water (crystal water). Physically, the clay particles are structured in layers of very small (less than 0.002 mm in diameter) hexagonal plates. With the addition of water (lubricant water or water of plasticity) to the clay, the particles can slide past one another, but are held together by suction[277] (like thin glass plates in water). During the drying process the water of plasticity evaporates and, consequently, the vessels shrink. During the firing process, the 'ceramic change' takes place, i.e. the change from clay to ceramic material by the removal of the chemically bound water and sintering of the clay particles. The plastic clay converts into stone-like material.

Finally, we must call attention to the difference between primary and secondary clays, each of which is characterized by its own specific properties. Primary or residual clay is found in the place of origin. It is very pure refractory clay, relatively large in particle size and hence low in plasticity. A good example of primary clay is kaolin or china clay, the necessary raw material for the production of porcelain. Most clay, e.g. ball clay and red marls, however, belongs to secondary or sedimentary clay. This type of clay has been transported from the place of origin by natural forces like water and wind and has been deposited elsewhere. It is impure low-refractory clay, relatively fine in particle size and hence relatively high in plasticity compared to primary clay. Secondary clay like the clay deposited in the Mesopotamian Alluvial Plain is used for the production of earthenware.

The location of pottery production is to a considerable extent dependent upon the presence of good potter's clay.[278] According to the adage "clay makes the potter," stemming from the school of Bernard Leach and modern studio potting circles,[279] the quality of the clay determines the kind of ceramics that can be made. The well-known red- and black-figured Attic vases, for instance, can only be made of illite clay.[280] In general, we may say that from a potter's point of view the workability properties of clay are very relevant. Not every clay type is suitable for the forming or decoration technique the potter has in mind. There exists an explicit relationship between the working properties of clay and the forming and decoration techniques that can be applied by the potter. Particularly, the degree of plasticity of clay is an important factor. Throwing on a fast potter's wheel, for instance, requires rather plastic clay (fat or long clay). The coiling technique, on the contrary, demands relatively less plastic clay (short or lean clay) with a better adhesive capacity. As another example of the relationship between raw material and technique, natural, coarse, sand-containing clay is not fit to make a comb decoration. Such a decoration technique needs much finer clay.

The pottery presented in this study was made of secondary calcareous montmorillonite clay, which was deposited by the Euphrates and Tigris Rivers in the Mesopotamian Alluvial Plain. These alluvial clay deposits are called Baghdad silty loams. The name indicates the presence of silt, calcium and clay components.[281] Calcium occurs in several different forms, such as calcium carbonate, calcium magnesium carbonate, calcium chloride and calcium sulfate (gypsum). The clay also contains sodium compounds such as NaCl and $Na_2SO_4$ and magnesium compounds such as $MgCl_2$ and $MgSO_4$. Besides these, it includes components of potassium like $K_2CO_3$ and KCl. Because of strong evaporation and small amounts of rainfall in southern Iraq, the groundwater, which always contains salts, moves upwards, and the clays become brackish. Due to the yearly inundations of the meandering rivers, the Alluvial Plain has been built up of depositions of sand, silt, loamy clay and very fine clay alongside and on top of each other.

The natural clay in the Mesopotamian Alluvial Plain the potters had at their disposal was not very plastic.[282] The lack of plasticity and cohesive strength of these clays is caused by the generally low real clay content in relation to the silt content. Furthermore, the clay mixtures are poor in organic matter, caused by the high salinity of the Mesopotamian soil. As a result, no bacterial gels are formed that would increase the clay's plasticity. In this respect the dry climate was another negative factor that the potters had to deal with.

The picture of the nature, composition and workability properties of the clay from the Mesopotamian Alluvial Plain as sketched here corresponds with the results of the analyses of the clay samples. Only clay samples that are in principle usable for the manufacture of pottery were taken. Clay samples that were too loamy were not selected (field test). A part of the clay samples comes from the surface in the direct vicinity of Tell ed-Dēr, Nippur and Isin. Other samples were taken from ancient clay layers, the so-called "raqub" (the remains of Sassanian or Islamic irrigation canals) ; from an ancient branch of the Euphrates ; from sedimentary deposits at a depth of a few meters, which during the second millennium BC must have been on, or close to, the surface ; and from dated layers of the sites. Furthermore, samples were taken of the natural clay used by the potters northeast of Baghdad (see also 5.). Though situated near the Diyala River, the workshops of these potters are located in the basin of the Tigris. The clay samples proved to be not very plastic. They were not very suitable for throwing on the fast wheel. For this purpose they need some preparation. The shrinkage during drying and firing was rather low.

Nineteen microprobe analyses have been executed with representative clay samples at the Kamerling Onnes Laboratory of Leiden University.[283] An evaluation of the spectra confirms that the natural clays from the Mesopotamian Alluvial Plain are very homogeneous over a large area. All clay samples, for instance, are rich in calcium in a well-distributed form. This causes problems for the archaeologist interested in provenance studies, because it is difficult to determine the production location of pottery from two sites that are distant from one another, when the composition of the natural clay resources of both sites is roughly identical. In this context, we may refer to the opposite situation of heterogeneous clay beds and related archaeological problems. Close to Neolithic Sesklo in Greece, for instance, we found heterogeneous clay beds over a small area, displaying a considerable variety in color and plasticity.[284] A potter working at Dimini, close to Sesklo, told us that he was able to prepare a suitable clay body by mixing the various heterogeneous types of clay. In this case, it would be quite problematical for an archaeologist to recover the potter's recipe.

## 3. The Production Sequence

### 3.1. Clay Sourcing and Preparation of the Clay Body

Usually the production location is not far from the natural clay sources. The exploitable threshold model based on ethnographic data suggests a distance to the clay sources not further than 7 km for a profitable ceramic production.[285] The distance for exploiting other resources, such as slip, paint and glazes, probably was far greater than for obtaining the primary

277 So-called 'Van der Waals' forces.
278 Nicklin 1979.
279 Leach 1976.
280 Noble 1966.
281 Buringh 1960 ; 1986.
282 See also Franken and Van As 1994.
283 Jacobs 1991-92, 12-14.
284 Van As 1998-99 ; Van As *et al*. 1988.
285 Arnold 1985, 35-57.

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resources. Materials for making potter's tools are even imported from still greater distances.

Traditional potters worldwide learn to work with the available clay rather than alter the composition by adding tempering material. It is far more common to extract plant remains like rootlets and leaves roots, rocks, etc., than to attempt the laborious task of evenly adding tempering materials.[286] Dry or semi-dry clay must be exposed to water to cause clay lumps to disintegrate ; this process is called slaking. Dependent on the kind of clay, this takes a few hours up to several days. If the natural clay, though potentially usable, does not possess the appropriate workability properties for a specific manufacturing technique, the potter has to modify the clay into a proper clay body. In these cases, the natural clay requires preparation.

If natural clay is too plastic for a specific forming technique like coiling, the plasticity can be reduced by mixing the clay with a less plastic clay or by adding non-plastic tempering material (e.g., mineral material, crushed potsherds or grog). The more non-plastic material is added, the more the shrinkage is reduced and the better the clay coils adhere to each other.[287]

If clay lacks cohesive strength, fibrous organic tempering material is used to increase the resistance to tear and to prevent the clay from cracking during drying and firing. The fibrous material holds water, which has to evaporate before the vessels can be fired. Consequently, it retards drying (see also 3.3.).

Clay can also be too short for a specific forming technique, such as throwing on the fast wheel. In this case, the workability can be improved by mixing the clay with fat clay or by aging and levigation. During the process of aging, i.e. storing the clay for weeks or even years in wet conditions, the workability properties of the clay are improved because of swelling and bacterial action (souring). Through levigation (an artificial process of sedimentation) fine and coarse clays can be separated. As the percentage of fine clay particles increases, the clay becomes more plastic.

Finally, before vessels can be formed, the clay mass must be homogeneous, with an even distribution of moisture and inclusions and without air pockets. For this purpose, the potter wedges the clay, kneads it with his hands or tramples it with his feet.

The potters, who made the Mesopotamian pottery presented in this study, could rather easily find and gather clay in the Alluvial Plain that was usable for pot making. Since the Mesopotamians in the second millennium BC apparently did not make high qualitative demands upon their consumer ware, we may assume that most often the natural alluvial clay was used for forming pottery without adding tempering material or levigating the clay.

The potters quarried dry clay, soaked it in water and did not prepare it carefully before use. Microscopic fabric analysis of the vessels confirms the idea that the potters did not add tempering mineral material nor purified their clay (see also 4.1.). The variety of mineral non-plastics in the fabric of the pottery reflects the normal composition of the natural alluvial clay. Typically for mass-production, no attempt was made to remove undissolved lumps of clay and small pebble stones that are often found in the sherds. Undissolved clay lumps are tiny pieces of clay that did not dissolve in the process of soaking the clay in water as part of the preparation before use. They can easily be seen, even without a magnifying glass, in fresh cracks and show up as conglomerates with a structure that is identical to that of the matrix. They display whatever impurities the natural clay contains.

The natural clay that was used by the Mesopotamian potters was rather short by itself. It does not show more than the usual average shrinkage. Consequently, the reduction of the plasticity and shrinkage by adding mineral temper was not really necessary. However, because of the lack of coherence of the natural clay, the potters added vegetable matter to the clay. The amount of this material varies considerably. Sometimes the presence of vegetable matter seems to be accidental. In other cases, so much organic material has been added to the clay that the resulting holes in the wall seem to take more space than the clay itself. The variety of organic tempering material reflects the variety of plasticity and coherence of the clay. Moreover, the personal preference of the potters and lack of accuracy in adding organic material to the clay play a role. The potters used two kinds of organic material : remainders of the threshing floor (chopped chaff) or dried dung. Rather coarse chaff was generally used as tempering material for forming vessels without the help of a potter's wheel. The clay body used for throwing vessels on the fast wheel was usually tempered with more-or-less finely chopped chaff or dried dung. To prevent clogging and to ease labor the dry chaff temper was added in small quantities throughout the muddy clay. Some of the tempering material was flat in section and several times longer than wide. Such material will react to the rotation of the clay on the wheel and tend to settle in a horizontal position, parallel to the direction of rotation. In relatively thick vessel walls the orientation of the chaff is more pronounced near the surface, because of the pressure of the fingers.[288] Generally speaking there is a tendency that the bigger the vessels, the thicker the wall, the coarser the chaff and the greater the amount of these fibers. Very fine vegetable matter could be added in the form of dung. This would increase the coherence and plasticity of the clay.[289]

The bases of the goblets and some other forms have the tendency to crack during the drying process prior to firing due to unequal drying of the base and wall, which have different thicknesses (see also 3.3.). The Babylonian potters developed techniques for dealing with this problem. They found a number of methods to strengthen the bases (see also 3.2. and 3.3.). For each of these methods the potters used a specific mixture of clay, i.e. clay mixed with an extra amount of organic material. Such a clay body had to be prepared and ready before the potters could begin forming the vessels.

## 3.2. Shaping Techniques

### *Introduction*

Archaeologists usually make a distinction between handmade and wheel-made pottery. The ceramists Ian Edwards and Loe Jacobs propose the following definitions of these primary potter's techniques.[290]

> 'Hand-building' or 'hand-forming' is the building or forming of a pot by any means, but without the use of centrifugal force.
>
> 'Throwing' a pottery vessel is the forming of that vessel on a wheel which rotates at sufficient speed to allow the pottery to employ centrifugal force as an active agent in the formation of shaping of the vessel (50+ revolutions per minute).

Alongside 'hand-building' and 'throwing', 'turning' can also be distinguished. 'Turning' is the forming of a vessel on a wheel that rotates at low speed, insufficient to use the centrifugal force to lift up the clay during the shaping process (approx. 35 revolutions per minute). Instead, firm pressure is exerted simultaneously on the inside and outside of the wall to bring up the clay.

The three shaping categories include a variety of sub-categories. Handmade pottery, for instance, may have been formed by pinching, slab modeling, drawing, coiling, molding, or by using

286 LONDON 1991, 189.
287 JACOBS 1983.
288 See also COURTY and ROUX 1995.
289 LONDON 1981.
290 EDWARDS and JACOBS 1986, 50.

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the hammer and anvil technique. Pottery made on the fast wheel[291] may have been thrown from a single piece of clay. Throwing tall vessels involved the use of coils or previously thrown cylindrical elements. Smaller vessels could be thrown quickly from a hump or cone of clay. Throwing from the hump involves the centering of a large hump of clay in a conical shape on the wheel-head. Thereafter, the potter is able to throw many small or medium-sized vessels from the clay at the top of the hump. Besides vessels formed by utilizing one of the aforementioned techniques, there are also vessels that are formed by composite techniques.[292] The composite techniques are combinations of a number of different techniques. These may be simple additions or alterations, like spouts, handles or foot-rings that are made to the basic shape formed in the primary technique. On the other hand, ORTON *et al*. (1983, 125) refer also to more complex combinations like globular hand-formed or wheel-thrown vessels that were beaten between a paddle and anvil (usually a rounded stone) to make the wall thinner and give the vessels more volume. Another example of the application of a composite technique includes vessels with a molded lower part and coiled or wheel-thrown upper part. The vessels exhibit traces of both techniques.[293] Apart from the fast-rotating wheel,[294] there are a number of other potters' tools employed for shaping vessels, like the turntable and the rib. The turntable or tournette is a small hand-operated disc or other device, lacking the weight for sustained rotation and the centrifugal force that supports a vessel being formed. The rib is a tool made of bone, flint or pottery that was used to scrape the wall of the leather-hard vessels to make them thinner (see also 3.3.). Scraping belongs, like trimming, shaving, beating and turning, to the secondary forming techniques, executed while the vessels were already leather-hard.[295] In contrast to the artificial division made in some archaeological literature between 'forming' and 'decorating' vessels, RYE (1983, 89) considers the secondary forming techniques as associated with producing a vessel and the decorative forming techniques to establish its aesthetic character. Smoothing, like burnishing and polishing, is a decorative forming technique.[296] Other decorative forming techniques include cutting techniques, displacement techniques and joining techniques.[297] In addition to these decorations that are applied before firing, there are post-firing painted decorations as well. For an overview of the descriptions of the various forming techniques with bibliographical references to ethnographic studies the reader may be referred to a number of publications.[298]

Several studies have been published on the organizational aspects of the production of pottery.[299] VAN DER LEEUW (1977) has tried to combine aspects of technology and organization of the pottery production process and the distribution mechanisms into one model or "flow" structure. He distinguishes seven modes of production, each one with its own characteristics regarding scale, technology and organization. This flow model shows that potters are organized in different ways, ranging from households producing a limited range of utilitarian pots for their own use and small workshops producing a wide range of pottery, to specialized workshops producing luxury wares, and traveling potters. The exchange mechanisms of these different modes vary. The clientele for which the potter produces can be a household, village or town, or a much wider region. The pottery may come to the client (itinerant potters), or the client goes to the pottery workshop. Vessels may be sold in the streets, where seller and buyer meet. Middlemen may distribute pottery from one or more workshops over a wider region.

In the second millennium BC the Babylonian potters produced handmade and wheel-thrown pottery. A combination of both techniques was also applied. Only relatively few vessels are decorated. Besides incised and appliqué decoration, we find a post-firing bitumen decoration. In the presentation of the shaping techniques below, we will follow the classification of open and closed forms, respectively, including trays or platters and bowls, and goblets, cups and jars.[300] In this study we will not enter in detail into the organizational aspects of the pottery.[301] Some remarks as to that can be found in our conclusions.

### *Open Forms*

Open forms are characterized by a wall that is orientated outward with respect to the axis of the vessel and without taking into account the orientation of the rim, even if the rim is directed inward.[302]

*Trays or Platters* (Pls. 1 to 9 ; Groups 5 A to 5 E). Trays or platters have a flat base and a diameter of about twenty to thirty centimeters. In general, they have a low rim, but sometimes the rim is somewhat higher. In the manufacturing technique of the platters two basic forming techniques could be distinguished : hand-forming and wheel-turning.

The shape of the handmade trays is irregular (e.g., Pl. 1 : 1 to 4, 7 and 8 ; Pl. 2 : 8 and 13.). The potters began by flattening a large lump of clay. To form the base the flattened piece of clay was laid on a more or less flat surface or on a kind of turntable. The inside of the base is sometimes smoothed, but often the impressions of the potter's fingers are still visible. A coil of clay was attached to the base and shaped into a low raised rim. In other cases, the flattened piece of clay was inserted and attached to a ring of clay. If the trays show deformation, it means that they were lifted and removed to dry elsewhere while the clay was still wet. As soon as the trays were leather-hard, they were strong enough to be turned upside down to scrape the base. At the same time, the thickened joint between the base and the raised rim, which is sometimes still observable (e.g., Pl. 1 : 8), was usually reduced.

To begin with, the potters who formed wheel-thrown trays (e.g., Pl. 2 : 16 ; Pl. 7 : 1 ; and Pl. 9 : 1) did not, as usual, center a lump of clay on the wheel-head to open it. Such would not have been possible, because of the lack of stretching capacity of the rather short clay that was used. The wide base would easily crack. In order to throw a tray with a wide base from one lump of clay, the potter would have to use a much more plastic clay. The Babylonian potters, however, solved this problem in the following way. First, a bat, i.e. a separate disc made of pottery, wood or stone, was fixed on the wheel-head with some clay. Next, the potter covered the bat with clay dust and/or organic material. Hereafter, he put a flattened lump of clay on the bat. By flattening the clay, the clay particles were arranged into a position that gives the clay a much more stronger structure. During the firing process the clay dust that had been on the surface of the bat attached itself to the trays and the organic material was burnt out. The clay dust and impressions of organic material can still be observed. In order to strengthen the coherence of the clay, the potter pushed the clay together by

291 WOODY 1976.

292 ORTON *et al*. 1993, 125.

293 In fragmentary material of pottery made by a combination of techniques it is important to recognize the connection between the sherds from the two parts of the vessel.

294 Cf. FOSTER 1959 ; ROUX 1989.

295 RYE 1981, 84-88.

296 *Ib*.

297 RYE 1981, 90-95.

298 E.g., RICE 1987, 124-144 ; RYE 1981, 62-65.

299 COSTIN 1991 ; PEACOCK 1982 ; VAN DER LEEUW 1977.

300 Cf. FRANKE 1987 ; FRANKEN and KALSBEEK 1984 ; GASCHE 1989, 75-99 ; *MHEM* 4, 26-39 ; MINSAER 1991a.

301 Studies of production organization are rare in Near Eastern archaeology ; see DUISTERMAAT 2008.

302 GASCHE 1989, 76.

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scraping the base on the inside. A number of trays have a relatively high wall (e.g., Pl. 4 : 1, 10 ; Pl. 8 : 7 ; and Pl. 9 : 7 to 9 and 12). For the forming of these trays the potters made use of a faster rotating wheel. During the turning process they usually held the rib against the interior of the wall. For this reason, these trays have a more taut appearance.

As soon the shaping was finished, the bat with the tray still on it was lifted from the wheel-head and put aside to allow the tray to dry. If a porous bat was used, which could easily absorb moisture, the dry and shrunken tray could very easily be separated from the bat. As soon as the clay was leather-hard the trays were scraped with a rib. The bases of some trays were scraped like the handmade trays, while resting on the hand of the potter. A number of trays show an exterior of self-slip (see 4.2.). In these cases, the base was scraped while the tray was standing upside-down on a rotating wheel. At this stage a ring-base, if any, was formed at the same time.

*Bowls* (Pls. 10 to 18 : 9 ; Groups 10 A to 10 G. Pls. 22 to 25 ; Groups 15 A to 15 E. Pls. 31 to 42 ; Groups 20 A to 25 A). A number of characteristics, such as the small size and the string-cut base, indicate that the bowls were thrown from the hump. Throwing from the hump is a fast technique, which enables mass production (see also 4.2). The bowls were finished in several different ways. We may distinguish between scraped and non-scraped bowls, bowls with a straight rim and bowls with a thickened rim, and finally bowls with a flat base and bowls with a ring base.

The following is a description of the main steps in the forming process of the bowls. First, the potter centered and pressed a hump of clay into a cone-shape on a fast spinning wheel. Then, he opened the top of the cone with his fingers and pulled the wall upwards. Either a straight rim was formed or the rim was thickened or profiled through respectively pressing the clay downwards or folding the clay. The wall was forced into the desired position. The potters provided some thin-walled bowls with a ridge on the outside of the wall (e.g., Pl. 38 : 16 to 28 ; Group 20 $J_2$). In the next stage, the bowls were cut from the cone with a wire. In contrast to closed forms like the goblets, it would have been easy for the potter to cut open forms from the cone while taking care to maintain an equal thickness of base and wall. It is therefore noteworthy that the bases of the bowls are much thicker than the walls, especially in the Kassite Period. The potters probably did this on purpose, because a thick base gave more strength to the still soft shapes, so they could be lifted up from the cone to be put aside to dry. The disadvantage of thick bases, however, is the risk of cracking during the drying process (see 3.3.). Due to the difference between the quickly drying thin wall and the slowly drying thick base, tensions and consequently cracks develop easily. Before firing, the cracks that developed during drying could be repaired through filling them with clay tempered with a large amount of organic material. Potters also developed techniques to prevent cracks (see 3.2. *Closed Forms* and 3.3.) (e.g., Pl. 36 : 2 to 4, 8, 12 and 15 to 17 ; Group 20 $H_1$).

After the bowls had been allowed to dry for some time, some were provided with a ring-base. The ring-base was initially made by partly scraping clay from the bottom of the base. It was then sometimes finished by means of further turning on the wheel (e.g., Pl. 14 ; Group 10 $B_2$). The feet of another category of bowls were probably directly thrown upside-down on the wheel (e.g., Pl. 12 : 16 ; Group 10 $A_2$).

*Large Bowl-Like Vessels* (Pls. 26 to 30 ; Groups 15 F to 15 H). The large bowl-like handmade vessels were shaped through coiling, pinching and scraping. Finally, the outside was smoothed with a layer of slip. The thickened rim, ring-base and appliqué decoration were respectively made of thick and small coils of clay. In order to reduce the risk of cracking during drying the potters made a gradual instead of an angular transition from base to wall. Since heat needs time to spread equally and gases need to escape, firing large thick-walled pottery is not easy. It takes time for heat to spread equally through the thick walls, and gases need to escape slowly from the ceramic in order to avoid explosions. Therefore firing large thick-walled pottery requires skill and experience. Firing large thick-walled pottery is facilitated by the open structure created through the abundant use of chopped straw as tempering material (see the discussion of pores in 4.1.).

Some bowl-like vessels show bitumen on the inside. It was probably applied to decrease the permeability and make the pottery waterproof.[303] The production of large bowl-like vessels was rather time-consuming. This may be a good reason why broken vessels were often repaired with bitumen.[304]

### *Closed Forms*

Closed forms are characterized by a wall that is orientated inward with respect to the axis of the vessel. Closed forms also include vessels with a convex profiled belly with respect to the axis of the vessel. The body is in some cases provided with a neck.[305]

*Goblets* (Pls. 57 : 12 to 58 ; Groups 90 A to 90 C. Pls. 59 : 2 to 62 ; Groups 95 $A_1$ to 95 $A_2$. Pls. 99 to 103 ; Group 215 $A_2$). Goblets are beaker-shaped vessels. Compared to the other categories, the goblet is the most informative, because it is the most frequently and widely attested shape in the whole of the second-millennium Babylonian ceramic repertoire, having been produced in the tens of thousands.[306] The second-millennium goblets are either tall, slim beakers with a small base or rather squat beakers with a little larger base. We may distinguish a variety of shapes in this period.[307] All goblets were thrown on the fast wheel. In most cases it can be ascertained that they were thrown counter-clockwise from the cone (see also 4.2.). Throwing from the cone is a very suitable technique for producing rather small-sized vessels like these goblets. Particularly, the shaping of a foot by constriction the lower part of the wall could easily be accomplished by using this technique. First, a hump of clay was centered on the wheel. Next, the top of the hump was opened and a cylinder was formed. Although all goblets are tall and narrow, we may make a technologically important distinction between goblets with a circumference that permitted the potter to insert his hand and goblets that were too narrow for the insertion of a hand.[308] The lower sections of the tall goblets in which the potter could insert his hand show the profile of the stretched hand with the fingers down. Here the base could be reached and the thickness of the wall modified after the vessel had been pulled up to its final height. With respect to the goblets in which the potter could not insert his hand, FRANKEN and KALSBEEK (1984, 84) point out that it requires good craftsmanship to make these goblets with a thin wall and base. To achieve this, the lower part had to be thinned between the fingers in several movements before the clay for the upper part was pulled up. In doing this, the thinner and still weak lower part could easily collapse under the weight of the clay lump still on top of it.

Most of the goblets in which the potter could not insert his hand have a thick wall and base.

> "If the shape was so narrow that only two fingers could be inserted, the lower part of the vessel could only be reached as

303 FORBES 1964, 90-95.
304 FORBES 1964, 95-98 ; MOOREY 1994.
305 GASCHE 1989, 76.
306 *MHEM* 4, 26.
307 *Ib.*, 27-39.
308 FRANKEN and KALSBEEK 1984, 84.

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long as the vessel was not higher than the length of the fingers. Once the clay had been pulled up above this point, the lower part could not be reached any more, and remained thicker than the upper part. The lower part of the vessel could only be modified on the outside. The potter closed his hands around the lower part in such a way that the whole circumference of the wall was in contact with his hands. Slowly pressure was applied and increased while the pot was turning. The hands moved upwards to make the narrow part join smoothly with the wider part. While doing this, the wall became even thicker near the base. On the inside folds occurred, 4 to 12 centimeters high, causing an irregular thickness of the wall. Since the pressure on the turning pot was distributed rather evenly, the thinner part of the wall gave way easier than the thicker part. As a result many of these beakers are clearly lopsided. This process is accentuated by the fact that from natural inclination the potter exercised more pressure when the circumference got narrower".[309]

Since the potter could not feel the inside of the base of a goblet that did not allow the insertion of a hand, it is difficult to cut the goblet from the cone in such a way that the base is of a correct thickness. Cutting a goblet too high from the cone causes a hole in the base. On the other hand, if a goblet is cut too low the base becomes too thick, and as a result will easily crack during the drying process.[310] Only when the potter was able to cut a goblet at the right height from the cone did no base defects arise. For a presentation of the different heights at which the vessels were cut from the cone (correct, too high, too low) and the consequences for the base of the vessels, the reader is referred to VAN AS and JACOBS (1987, 42-51). Holes and cracks in the bases due to incorrectly cutting the goblets from the cone could be repaired before firing. For this purpose, the potter used clay mixed with a large amount of coarse organic temper (see also 3.3.). The cracks and holes were smeared or patched with some of this material (see the "patched" base of Pl. 112 : 8). In addition, we could identify two other solutions adopted by the second-millennium Babylonian potters to deal with the tendency of bases to crack prior to firing. These solutions apply not only to the bases of goblets, but also to the bases of other forms, open and closed as well. Clay that had been tempered with a large amount of vegetal matter figured in each of these solutions, because such clay strengthened the bases and made them less likely to crack during drying. The two solutions include : (1) deliberately leaving a hole in the vessel's bottom that would then be filled with a plug of extra organically tempered clay (Fig. 24) and (2) adding extra organically tempered clay to the hole in the center of the cone of clay on the wheel, so that as the vessels were thrown, their bases for the most part came to be filled in with this material (Fig. 25). The two preventative strengthening methods results in bases that have been described as (1) "plugged" (see Pl. 58 : 6) and (2) "filled-in" (see Pl. 99 : 4).[311] Applying the second method, part of the more coarsely organically tempered clay was sometimes drawn up as well and remained in the lower part of the vessel's interior. Besides the inaccuracy in adding organic material to the clay, the mixing with both clays during the throwing process explains the variations in the amount of organic material found in the vessels. The bases of the leather-hard goblets were finished upside-down on a soft cone of clay centered on the wheel. Other goblet bases were finished by hand.

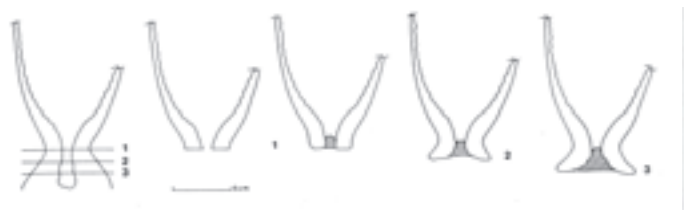

Fig. 24. Strengthening the base by method 1 (plugged base).

Fig. 25. Strengthening the base by method 2 (filled-in base).

The bases of the tall, narrow goblets are small and not very practical for keeping the vessels upright. Franken and Kalsbeek give the following reason why the potters nevertheless narrowed the wall above the base, thereby creating the characteristic conical profiles.

"When the beaker was finished it had to be cut loose from the wheel or cone. This was done with a piece of wire. Cutting traces are visible on many bases. The large amount of organic matter present in the clay made it very difficult to cut away large, wide bases, because the temper accumulated in front of the cutting wire and cut deeply into the clay. This could cause warping of the freshly made shape. On the one hand a narrow and thick base gave less damage while cutting the vessel from the wheel, on the other hand the thick base was a disadvantage when leaving the vessel to dry. Although shrinkage was reduced by the presence of organic temper, one can frequently notice cracks near the base".[312]

Narrowing the lower part of the beaker makes the wall thicker and the circumference smaller, which makes it much more stable with regard to lifting the weak freshly formed beaker from the cone. This is a good example of the close relationship between form and shaping technique. The narrow and thick walled bases are a direct result of the throwing process from the cone. There are, however, beakers with a wide base on which they can stand properly. These beakers were consequently not thrown from the cone (Fig. 26). It seems clear that the tempering materials play a dominant part in the construction of these vessels. It is possible that they contain less or finer organic temper.

"The main feature of this pottery is that the opening allows the insertion of a hand, and that the base can be shaped with the fingers on the inside (Fig. 26 : 2 and 3). When the beaker was made higher and thinner the circumference became slightly wider. The lower part was pulled up between the knuckles of both hands exerting pressure on either side, the upper part was made between the fingers of one hand (Fig. 26 : 3 to 6). With the free hand some pressure was applied to reduce the circumference of that part. Next the transition from the body to the neck was accentuated by widening the area from within. The neck was made smooth, somewhat thinner and straight with the aid of a rib (Fig. 26 : 7). This can be seen from the characteristic traces. Finally, the whole shape was dressed with the rib, which was used on the entire outside surface. Inside the beaker was wide enough for the rib to be used down to the base (Fig. 26 : 8). The pot was not made narrower near the base. It was cut loose below the base, which had a fairly large diameter (Fig. 26 : 9). After

309 FRANKEN and KALSBEEK 1984, 84.

310 Cracks can also be caused by self slip which is left behind on the inside of the base after throwing. This clay slip could not be removed because the goblets were in general too narrow. No traces were found of the removal of the clay slip from the base. During the drying process the bases were thus wetter than the remaining part of the goblets.

311 *MHEM* 4, 27-28 ; VAN AS and JACOBS 1987, Fig. 4.

312 FRANKEN and KALSBEEK 1984, 86.

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drying the pot was put upside down, and the wall near the base was made thinner by scraping away the surplus clay. Now a base ring was made. It is not clear whether or not this ring was made separately, or shaped out of the surplus clay from the base (Fig. 26 : 10)".[313]

*Cups* (Pls. 85 to 86 ; Groups 170 A to 170 D. Pls. 96 to 98 ; Groups 210 A to 210 C). The cups can be differentiated in various ways : small-, medium- and large sized cups, medium to tall-necked cups and plain and fine ware.[314] Technologically, the cups are thrown from the cone. The thin-walled fine ware has been made with more care than the plain ware. The same problem of cracked bases and the same solutions to prevent them as have been observed with the goblets and some bowls are attested among the cups as well.

*Large High Beakers* (Pl. 56 ; Group 80 A). The shaping technique of the large high beakers differs from the other beaker-like pottery. The high beakers were manufactured by throwing several prefabricated cylindrical parts, which were then joined together. The leather-hard beakers were scraped on the outside while being turned on the wheel. The base was also scraped until the required thickness was obtained. Next, a coil of clay was added and was shaped into a ring-base on the wheel.

*Jars* (Pls. 125 to 129 ; Groups 270 A to 270 F). Considering the workability properties of the clay that was used, the large jars could not have been thrown from a single piece of clay. Only the upper section of the jar was thrown from a single piece of clay with the use of a rib. The lower section of the jar was hand-formed by using coils or slabs of clay, which were pinched together afterwards. Finally, the outside, if necessary, was lightly tapped with the flat hand or with some sort of tool and smoothed with a self slip layer. In some cases, a coil was attached to the base to form a ring base (e.g. Pls. 125 : 1 to 126 : 6 ; Group 270 $A_2$). Due to the intervening drying phases it was possible to form the large jars of clay, which are otherwise very difficult to produce. This technique, which was also used for the manufacture of large, more globular shapes, may point to a certain division of labor : one potter threw the upper part, while another completed the lower section of the jar by means of hand-forming.

Fig. 26. Throwing beakers with a wide base.

*Globular Jars* (Pl. 79 : 6 to Pl. 84 ; Groups 160 A to 165 C). The globular jars were thrown from one single piece of clay with the use of a rib on the outside of the wall. In view of the relatively bad workability properties of the clay, the shaping of these jars from one piece of clay must have been rather problematic. After a phase of drying, the thick wall and base of the leather-hard jars were reduced by means of scraping the outside while the jar was turning on the wheel. In some cases, clay was saved in order to form a ring-base. In other cases, a ring-base was made on the wheel after a coil of clay was added to the base. After the first drying phase a number of the jars were also scraped on the inside.

### *Decoration*

Besides applying incised and appliqué decoration, the potters of the Old Babylonian Period also used bitumen to paint a part of their pottery repertoire (e.g. Pl. 41 : 10). Bitumen is a naturally occurring organic material, used very frequently in the Near East throughout history until the modern age. Bitumen was used for a wide variety of purposes : to haft composite flint tools, to waterproof containers or boats, to build the massive ziggurat temple-mounds and, more prosaically, to repair broken pottery.[315] The use of bituminous materials was not restricted to practical purposes : the so-called "bitumen mastic", which has been shown to be a natural bituminous rock, was used for carving masterpieces of sculptural art.[316] Strangely, however, bitumen rarely appears to have been used for pottery decoration in the Near East. This is striking, not just because of the common occurrence of the material but also considering the ease with which it may be applied to a vessel surface. Painted bitumen decoration is found rarely in earlier periods. The Neolithic bitumen-painted ceramics at Tell Sabi Abyad represent the earliest evidence attested so far of bitumen used as a pigment for pottery decoration.[317] Other examples come from the end of the Late Uruk period at the end of the fourth millennium, from Habuba Kabira.[318]

## 3.3. Drying

Drying is the establishment of the equilibrium of the moisture content between object and air.[319] During the drying process the water of plasticity (lubricant water added by the potter) is removed, causing the vessel to shrink. The movement of water through the wall of a vessel during the drying process enables dissolved salts and fine clay particles to be concentrated on its surface. This is the so-called scum layer. As soon as the individual clay particles touch each other the clay is leather-hard. At this stage the potters can modify the clay surface, for instance, by scraping, without causing of the vessel to collapse.

Vessels have to be dry before they can be fired. If the clay is still wet, too much water will come free in a short time causing steam pressure that will shatter the vessel during the firing proc-

313 *Ib*. 86-88.
314 *MHEM* 4, 31 and 33.
315 MOOREY 1994.
316 CONNAN and DECHESNE 1996 ; 2001.
317 CONNAN *et al*. 2004.
318 SÜRENHAGEN 1974.
319 HAMER 1976, 104.

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ess. Unwanted cracks may develop during drying.[320] Drying cracks usually occur on the base and where two pieces of clay have been joined. The S-shaped cracks are restricted to the bases of thrown vessels.[321] In general, potters are able to take a number of measures to avoid the development of cracks during the drying process, for example, by taking care that the vessels do not dry too fast. Because of the slow transport of moisture in the clay, fast drying outside in the full sun will result in drying defects.[322] When drying cracks are a recurring problem, potters can also adapt their raw materials or begin to use other forming procedures, as has been discussed above.[323]

There are a few indications that give information about the drying process of the second-millennium pottery. These especially concern the problem of the development of cracks in the bases due to unequal drying when the base is thicker than the wall. We have seen that the Mesopotamian potters repaired the cracks, but also found a solution to avoid cracks in the bases of goblets and cups by using extra organically tempered material in the bases (see 3.2.). Besides this method, the Mesopotamian potters might have tried to prevent drying cracks by means of putting the vessels upside-down during the drying process. When placed upright, the base will dry slower than the wall, because only a part of its surface is in contact with the air. This increases the chance of bottom cracks. By setting the ware upside-down when it is stiff enough to hold its shape, the entire vessel is exposed to the air so that the difference in drying speed between the wall and base decreases. The drying process becomes more even and consequently the risk of cracks is diminished. Vessels that have been dried upside-down generally show a more articulated crack on the outside of the base. When the base crack is more articulated on the inside of the base, we may assume that the vessel was dried upright. Unless it was scraped off in the leather-hard stage, the scum layer is also present on the outside of the base section in cases where the vessel was dried upside-down.

## 3.4. Firing Technique

After a carefully monitored drying period, the vessels can be fired.[324] Pottery is fired in an open fire (bonfire) or by using a kiln.[325] In open fires and pit kilns the pottery is stacked immediately on top of and in between the fuel. Consequently, the ware is subjected to the direct impingement of the flame. In general open fires achieve relatively low temperatures. The temperature and firing atmosphere cannot as effectively be controlled as in a kiln of permanent construction. Therefore, pottery fired in a bonfire is characterized by non-uniform mottled colors unlike the Babylonian pottery of this study.

The very vulnerable dry vessels are carefully piled in a kiln, separated from the fuel. Big heavy vessels are usually stacked below with the smaller pots and bowls on top. As much as possible, the vessels are placed upside-down in the kiln.

The first stage of the firing process is called water smoking, in which the water that is locked inside the pores of dry clay (pore water) is removed by slow heating to ca. 120° C. When the clay has been dried in this way beyond the naturally dry state, which it reaches in the air, the clay is bone dry. Between 120° C and 350° C the vegetable matter in the clay breaks down. The ceramic change, i.e. the conversion from clay to ceramic takes place between 350° C and 650° C. The clay loses its chemically bound water so that ultimately the original mineral structure changes and the clay becomes permanently hardened. Between 700° C and 1150° C carbon and sulfur burn out, and a hard insoluble scum layer is formed on the surface of the vessel. The scum layer consists of salts fused with sulfur and other elements from the combustion gases. Glass formation or vitrification begins at 800° C. The maximum temperature of earthenware comes at ca. 1150° C. The higher the temperature, the lower the porosity and the harder the vessels. Over-firing (fired too high or too long) can create defects in the ware, such as excessive melting, warping, deformation, bloating and firing cracks.[326]

When the temperature rises too quickly, extensive bloating is associated with escaping firing gases. If the temperature rises further, fusion or excessive vitrification of the body, either locally or over the whole vessel, will occur. With increasing overfiring, the vessels will collapse. As a result of excessive overfiring the vessels will even fuse to one another. The percentage of vessels damaged during the firing process, the so-called 'wasters', forms the firing loss of the number of vessels fired in one kiln load. This percentage can be rather high. Cooling under controlled circumstances is the final stage of the firing process.

In addition to the temperature and duration of firing, the atmosphere is an important aspect of the firing process. The firing atmosphere is defined by the amount of air (oxygen) provided to burn the amount of the available fuel. Besides a neutral atmosphere, two types can be distinguished : an oxidizing and a reducing firing atmosphere. In an oxidizing atmosphere there is an excess of free oxygen, while in a reducing atmosphere oxygen is lacking.

The color of the fabric of a fired vessel depends on the content of iron/lime and carbon in the clay and the duration, temperature and atmosphere of firing. In a reducing atmosphere, or if the duration of firing is insufficient, the carbon will not completely burn out. In this case, the fired fabric gets a dark gray or black core. Complete reduction results in black-colored vessels.

The presence of much very fine-grained lime in the clay prevents the development of strong red surface colors.[327] Lime sand that is often added as tempering material, especially for the manufacture of cooking pots, may cause the problem of lime popping.[328] Lime popping is a surface defect on ware containing inclusions of calcium carbonate ($CaCO_3$) as limestone, shell, or calcite. When fired to temperatures between about 650° C and 900° C, the calcium carbonate decomposes, and after cooling the quick-lime (CaO) absorbs water from the air, which causes it to expand. This may induce the wall of the pot to flake or even to powder. Since salts that tend to react with the lime to form $CaCl_2$ counteract this process, salt or salt water is sometimes added to calcareous clays or clays tempered with calcareous materials such as calcite or shell.[329]

Kilns are constructed of refractory material. Updraft kilns consist of two chambers, the firing chamber and the pottery chamber, separated by a floor perforated with holes to let the flame and hot gases from the firing chamber pass upwards. These kilns are either open-topped or closed. In a downdraft kiln the heat first rises upwards. Then, the heat is drawn downwards through the ware and finally escapes through exit flues near the bottom of the chamber into a chimney. The main advantages of the use of kilns compared to open firings are : achievement of temperatures in the range of 1000° C-1300° C, regulation of the rate of temperature rise and control of the firing atmosphere by admitting or excluding air through openings into the firing chamber. The big advantage of a kiln compared to an open fire is the possibility of a more even and controlled rise and fall of temperature.

320 For a full discussion of drying and cracks, see HAMER 1976, 77-85.
321 See also RYE 1981, Fig. 46 and RICE 1987, Fig. 3.6.
322 RICE 1987, 67-71.
323 RYE 1981, 66.
324 For a full discussion of firing see HAMER 1976, 121-125.
325 RHODES 1968.
326 HAMER 1976, 27-28 and 211 ; RICE 1987, 106-107 ; RYE 1981, 66 and 111.
327 JACOBS 1991-92.
328 RICE 1987, 98 ; RYE 1976 ; 1981, 114.
329 PEACOCK 1984.

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Various kinds of fuel used for the firing process are known from ethnographic studies.[330] Important reasons for using specific fuels are, among others : the distance to the resources, costs, weight, required quantities and efficiency in use. Apart from wood, which seems to be the preferred fuel among traditional potters, we mention some other types of fuel : animal dung, prunings from fruit or olive trees, coconut husks, waste fibers etc. In present-day Iraq crude oil is used (see below and 5.).

Based on the interpretation of the color of the pottery, re-firing tests and experiments with clay samples (see 4.), we may conclude that second-millennium Mesopotamian potters generally fired their vessels in a kiln with a neutral to oxidizing atmosphere at temperatures varying between ca. 750° C and 1000° C. Exceptionally, completely black/dark gray vessels can be found that were fired under reducing circumstances (e.g., Pl. 75 ; Group 135 $C_2$). Damage due to lime popping occurred infrequently. Though the clay contains a considerable amount of calcium, this is very finely divided and not present in clusters.

The fuel of the ancient Mesopotamian potters and lime burners consisted of thorny desert shrubs called 'asagu', chopped straw, reeds and animal dung.[331] One needs, however, a lot of organic fuel to bring a rather large kiln to fire at 800° C-1000° C for a considerable length of time. If wood was used, it is hardly unthinkable that firing of such masses of pottery in the second millennium BC – although ancient Mesopotamia was greener than present-day Iraq – should have led to a lack of fuel.[332] Oil has twice as much caloric value as wood.[333] For this reason it should be plausible to find that in a region like the area near Hit, where oil is at such pressure that it comes up to the earth's surface by nature, crude oil was used as fuel for potters' kilns.[334] The light oil (petrol) coming up to the surface from certain sources was particularly suitable as fuel. Laboratory research has made it clear that ancient oil lamps from Susa were burnt with lighter fractions of crude oil, not with vegetable oils.[335] The use of oil products was known to the Mesopotamian potters in the second millennium BC as indicated by the bitumen paint on the surface of a small part of the pottery (see 3.2.). Large jars and pots were also found totally covered on the inside with bituminous material (see 3.2.). It is plausible that it was a means of limiting the permeability. FORBES (1964, 64) has suggested that it is not impossible that some of the bitumen-lined jars are really the actual melting pots of mastic, used as mortar in architecture. Heavy crude oil was especially used for the production of bitumen. If necessary, heavy crude oil was condensed by means of the evaporation of the lighter fractions. If we assume that crude oil was used as fuel for pottery kilns, there must have been a system of transport between the oil sources and the potter's workshops. The bitumen-lined jars could have been used for transportation of the crude oil. Finally, we might have an indication for the use of crude oil as fuel for potters' kilns in antiquity in the use of crude oil by the present-day potters northeast of Baghdad (see 5.).[336]

## 4. EVIDENCE OF THE RAW MATERIALS USED AND POTTERY TECHNOLOGY

In this section we present the evidence on which the foregoing paragraphs on the nature of the raw materials and the production sequence of the Babylonian potters are based. The evidence includes the main traces of the forming techniques left by the potters and the results of the analysis of the raw materials and firing technique.

### 4.1. The Raw Materials Used

Evidence of the nature (workability properties and fabric) of the raw materials that were used by the potters comes from traces left on the pottery, low-tech fabric analysis and high-tech (chemical) analyses. Since the natural clay in the entire Alluvial Plain is rather homogeneous, the emphasis of our research has not been placed on the study of the provenance of the pottery (production location) by means mineralogical thin-section analysis and chemical analysis. Our interest, however, has been aimed above all at the workability properties of the clay. For this purpose, low-tech fabric analysis has been carried out. This has provided data with regard to aspects that are relevant for the clay workability properties, such as the amount, size, and roundness or angularity of the mineral inclusions and the nature of the organic tempering material. Using this analysis technique, the mineral inclusions can only be identified to a certain extent. Because of the close relationship between the raw materials used and techniques applied by the potters, marks on the pottery can yield information on the workability properties of the raw materials.

#### *Traces*

*Stretching Traces*. Stretching traces are small cracks that developed during throwing and were caused by the poor plasticity of the clay used by the Mesopotamian potters in the second millennium BC (Fig. 27). Since poor clay does not have enough cohesive strength, the clay easily loses its coherence when the potter bends or draws up the clay too far. Therefore, the shapes of the vessels in the pottery repertoire are rather limited. It is nearly impossible to make vessels with a sharp profile. The potter might avoid developing cracks by rotating the wheel very fast

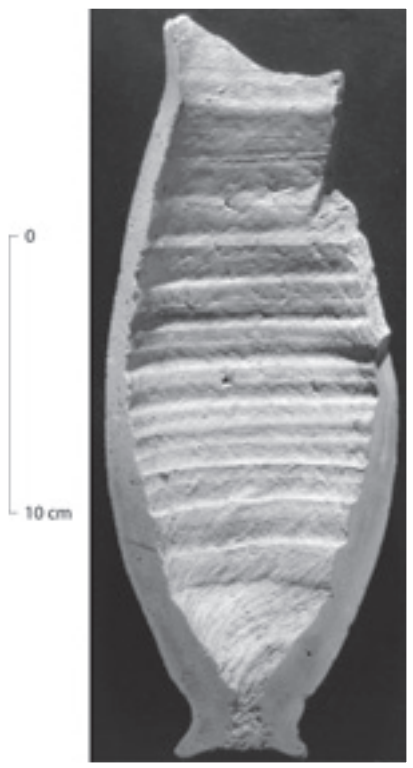


Fig. 27. Stretching traces visible in a wheel-made goblet caused by the poor plasticity of the clay (see also Fig. 39).

330 ARNOLD 1985, 53, 54 ; RICE 1987, 162, 163.
331 FORBES 1966, 15.
332 FORBES 1964, 35 ; MATSON 1965, 210.
333 FOURNIER 1977, 251.
334 FORBES 1964, 16, 24, 33, 35.
335 GASCHE 1989, 90.
336 This is doubted by SALLABERGER 1996, 18, n. 95.

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and by using the rib during the throwing process, because, when clay absorbs water during throwing, its coherence slowly decreases. This process continues until the clay loses its coherence completely, and the vessel's wall breaks open. Therefore, the potter tries to use as little water as possible. By using a rib, surplus slip is always removed and the outside surface is kept sufficiently dry.

*Low-Tech Fabric Analysis*

The fabric of a representative sample of the total pottery repertoire was analyzed. The fresh breaks of re-fired oxidized sherds were examined with a binocular microscope (10 to 40 times magnification) and each sherd was individually described. The fabric includes mineral inclusions and pores. A steel needle and a hydrochloric solution (30%) were used as aids in the description of some inclusions, the former to test the grains' hardness and structure, the latter to determine the presence of carbonates.[337] The grain size was determined with the aid of a scale incorporated into the eyepiece and a reference collection. The latter consisted of ceramic material manufactured in the Ceramic Laboratory of the Leiden Department of Pottery Technology, to which certain amounts of sand of a selected size had been added. The aforementioned reference collection was also used to determine the total amount of non-plastic inclusions. This amount was expressed in a percentage that refers to the (known) weight ratio of clay and non-plastics in a dry, unfired condition.[338]

Because of the character of organic material, only a rather rough estimate was made of the amount present in the clay body. The reference collection consists of ceramic material to which various amounts of organic material had been added. The collection includes several proportions of organic material to clay measured in amounts of dry volume on a scale of less than 5% up to more than 50%. The organic material used for the reference collection consists of coarse and fine straw collected near Tell ed-Dēr and cut in various sizes. In addition, dried grass was used.

*Mineral Inclusions*. The mineral non-plastic inclusions mainly include quartz, feldspar, mica, gypsum and orange/red grains. The last mentioned can possibly be identified as cornelian or chlorite (a variety of gypsum). Furthermore, although in lesser quantities, the following mineral non-plastics could be observed : pyroxene, amphibole, calcium grains (calcite), burnt out carbonate grains and black grains (possibly wolframite).

The prevalent grain shapes are sub-angular and sub-rounded. The micas are flaky. The grains vary in sizes. The dominant grain size usually does not exceed 250μ. The amount of silt ($\alpha \leq 50\mu$) varies between 5% and 15%, sometimes up to even 20% by weight. Coarser grains occur in quantities from nothing up to 20%, always in combination with a certain amount of silt, but the total amount of non-plastics almost never exceeds 25% by weight. Generally speaking this is not very much. Based on the analysis of the shape, size and amount of the non-plastic minerals, we may assume that they were present in the natural clay. In other words, they were not added as tempering material.

*Pores*. Based on the study of the pores, we may distinguish three groups of fibrous organic tempering material : (1) low : 1 : 10 or even less, the fibers being very small (0.5 cm or less) ; (2) medium : 1 : 5, the fibers being ca. 1 cm ; and high : 1 : 1, the fibers also being ca. 1 cm. Furthermore, very fine pores were observed. These are the remains of very fine small sized organic fibers included in dung (less than 2 mm).

The main disadvantage of the clay the Mesopotamian potters used was its lack of plasticity. Due to the open structure the clay tends to dry rather quickly in the Mesopotamian climate. The potters overcame both problems by adding animal dung to the clay. The addition of animal dung improves the plasticity of clay by (1) the development of bacterial gels and (2) by increasing its acidity. This way, the coherence of the clay particles is improved, because the weak electric current that keeps the mass together passes more easily through acidic water. Since experiments with clay samples show that the Mesopotamian clay does not shrink very much, we may assume that chopped straw was mainly added to the clay in order to keep its structure together during the forming and drying process. The length of fibers is between 2 and 10 mm. Another effect of the long and coarse fibers is the opening of the clay of thick-walled handmade pottery by means of numerous small channels, through which the water can escape during drying and water smoking. The presence of water in the hollow fibers retards the drying process.

Besides a certain degree of fibrous porosity (fiber-formed pores), organic tempering material also causes amorphous porosity, i.e., the result of amorphous organic matter that was mixed through the clay as part of the added dung. The fibers present in the dung were partly disintegrated due to the rotting process that took place when the clay was stored under damp conditions.

The rotting process improved the plasticity of clay due to the development of bacterial gels. Normally, this takes place after four or more weeks of damp storage. The process of the decomposition of organic material changes the color of clay into dark gray/black. It takes more than a year before the fibers are completely disintegrated. The Mesopotamian potters stored the clay mixture long enough to change a part of the fibrous matter of the dung into amorphous organic material. The presence of dung explains the difference in porosity between the sherds and fired test bars made of clay samples from the Alluvial Plain.

Under normal conditions, the organic material that is present in the clay may cause a black core in the sherd, visible after firing. Due to the open structure of the pottery, which is inherent in the Mesopotamian alluvial montmorillonite clay,[339] oxygen can easily penetrate into the sherd during the firing process. Therefore, any carbon present in the clay will for the most part be burnt out. Gases like $CO_2$ can escape easily through the open sherd structure. As a consequence, the potsherds seldom show a dark colored zone. The oxidizing/neutral firing atmosphere and the slow rise in temperature play an important part in the absence of a black core.

In this context a number of experiments were carried out, which have confirmed what has been described above.[340] Test bars made of clay samples from the Mesopotamian Alluvial Plain were quickly fired in an open fire after an incomplete drying phase. Other test bars of the same clay samples were slowly fired in an electric kiln. The fabric structure proved to be similar to that of the ancient pottery. In addition, some bowls made of a clay sample that had been mixed with ca. 5% by volume of goat manure were fired in an open fire, as well as in an electric kiln. Their fabric structure turned out to be similar to the structure of the sherds belonging to the second-millennium bowls, small dishes and goblets. After mixing the clay samples with goat dung, the mixture was stored under damp conditions for about eight weeks. After this period, a dark gray color and strong smell had developed as a result of the fermentation of the dung. Only a small amount of the fibers from the goat dung that had originally been added could still be identified. Failure to recognize that the dung added to the clay was allowed to ferment prior to the clay being used would lead to the erroneous conclusion that significantly less dung had been added than was in fact the case.

337 Cf. ORTON *et al*. 1993, 231-242 ; PEACOCK 1977, 30-32 ; STIENSTRA 1986.

338 JACOBS 1983.

339 GRIMSHAW 1980.

340 The firing experiments were executed in Archeon at Alphen a/d Rijn on 10 November 1994.

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*High-Tech Analysis*

*Microprobe Analysis*. At the Kamerling Onnes Laboratory of Leiden University 50 microprobe analyses were executed with 20 sherds.[341] In a microprobe the preferably smooth surface of a sample is bombarded by electron rays. As a result, the atoms of the sample material emit röntgen rays. The various elements can be determined with the help of the specific energy levels of this emission. The height of the different peaks is an indication of the relative quantities of the elements.[342] The three spectra representative for the occurring situations are presented here (Figs. 28-30).[343]

*Sherds*

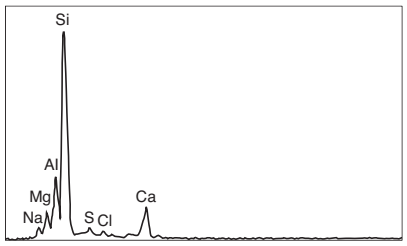


Fig. 28. Sherds : spectrum 1.

*Spectrum 1* (Fig. 28). A spectrum of 300 microns in the middle of sample D 107501 (Pl. 101 : 3) (white : 2.5Y 8/2[344]). Iron is lacking here completely. In this case there are two possibilities : there was either no iron present in the clay or any iron present became volatile during the firing process and subsequently disappeared from the sherd. Also small amounts of sodium and chlorine are present. These are possible remnants of NaCl, which was present in the clay itself. Above a temperature of about 850° C chlorine gradually separates from this connection. Consequently the height of the Cl peak does not represent the original amount of chlorine that was present.

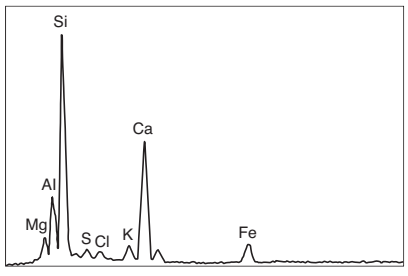


Fig. 29. Sherds : spectrum 2.

*Spectrum 2* (Fig. 29). A spectrum of 300 microns in the middle of sample D 108532[345] (pink : 7.5YR 8/4). With this amount of iron, part of Fe has been absorbed by the calcium silicates.

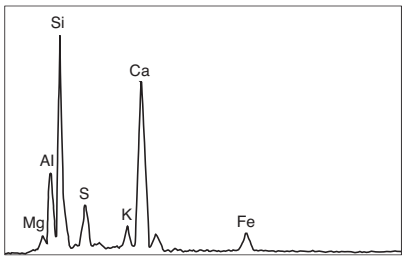


Fig. 30. Sherds : spectrum 3.

*Spectrum 3* (Fig. 30). A spectrum of 20 microns on the surface area of sample D 108532 (pale yellow : 10YR 8/3). The obvious difference with the previous spectrum is the amount of sulfur and calcium. The high calcium and sulfur content in spectrum 2 is related to the formation of a scum of gypsum on the surface.

In total 19 microprobe analyses have been executed with nine clay samples. The representative spectra are given here (Figs. 31-35).

*Clay Samples*

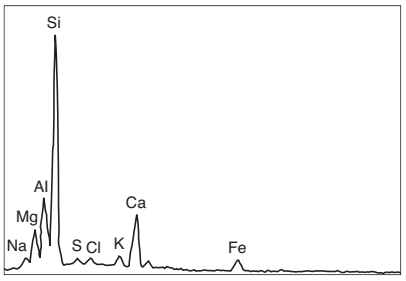


Fig. 31. Clay Samples : spectrum 1.

*Spectrum 1* (Fig. 31). A spectrum of 300 microns of a clay sample taken on the surface from the foot of the dike around Tell ed-Dēr. Iron is present. Sodium (Na), potassium (K) and calcium (Ca) are present in the clay.

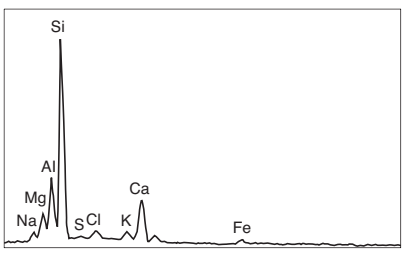


Fig. 32. Clay Samples : spectrum 2.

*Spectrum 2* (Fig. 32). A spectrum of 300 microns of clay taken north-east of Baghdad. This clay contains relatively little iron. The quantity, however, would be sufficient to bring about a red color if there were no fading factors. The clay also contains enough chlorine components to cause fading of the red color normally due to oxidized iron.

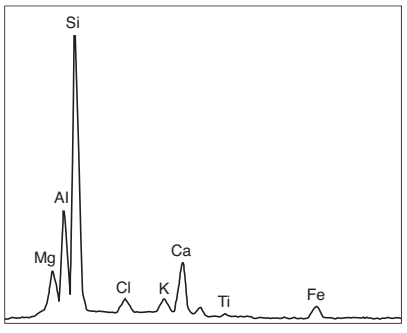


Fig. 33. Clay Samples : spectrum 3.

*Spectrum 3* (Fig. 33). A spectrum of 300 microns of a clay sample taken from a dated layer in an excavation pit at Nippur. This spectrum shows that iron in the form of iron sulphate does not occur in this clay. One possible form is iron chloride. This sample contains 3 to 4% of iron. There is, however, also a lot of chlorine present, which causes fading of the red color normally due to the oxidized iron.

341 The analyses executed by T.J. Goortenmulder, see JACOBS 1991-92.
342 JACOBS 1991-92, 9 ; RICE 1987, 402, 403.
343 JACOBS 1991-92, 10.
344 MUNSELL SOIL COLOR CHARTS (edition 1975).
345 JACOBS 1991-92, Fig.1 : 2.

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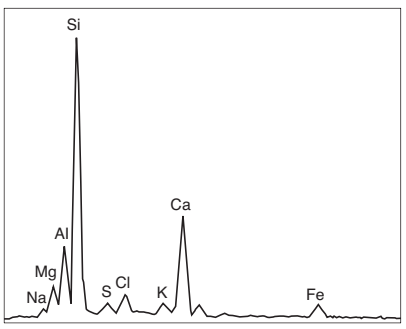


Fig. 34. Clay Samples : spectrum 4.

*Spectrum 4* (Fig. 34). A spectrum of a clay that is currently being used by workers in a brickyard not far from Nippur. Contrary to the previous sample, this one does contain sodium and sulfur. The calcium content is somewhat higher. The percentage of iron is almost the same. The amount of chlorine is adequate to make iron completely volatile in neutral conditions if the temperature is high enough. In addition, there are also components that cause the formation of a scum (see 4.2.).

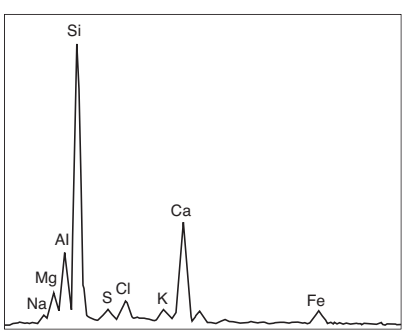


Fig. 35. Clay Samples : spectrum 5.

*Spectrum 5* (Fig. 35). A spectrum of 300 microns of a clay sample taken from a dated layer in the profile of a canal near Isin. This clay shows a remarkable resemblance to clays from Nippur (compare the previous spectrum). The Fe peak indicates a percentage of 3 to 4% of iron.

*XRF Analysis*. At the Institute for Inorganic and Analytical Chemistry of the Free University in Berlin second-millennium sherds from the Mesopotamian sites Uruk, Larsa, Djamdat Nasr, Khafajah, Bahizeh Zahireh, Kheit Qasim, Tell ed-Dēr, Nippur and Isin were chemically analyzed in an attempt in order to identify the source(s) of imported Mesopotamian pottery in Oman.[346] It turned out that it was not possible to attribute any sherd to a particular site, because, as the data from Tell ed-Dēr, Nippur and Isin demonstrate (see Table 1), the clays are very similar across the entire Alluvial Plain.

| Sample No. | $SiO_2$ | $TiO_2$ | $Al_2O_3$ | $Fe_2O_3$ | MnO | MgO | CaO | $Na_2O$ | $K_2O$ | $P_2O_5$ |
|---|---|---|---|---|---|---|---|---|---|---|
| ED01 | 51.21 | 0.821 | 14.13 | 8.53 | 0.161 | 6.16 | 14.76 | 1.73 | 2.21 | 0.252 |
| ED02 | 50.92 | 0.844 | 13.64 | 8.05 | 0.161 | 6.33 | 15.77 | 1.96 | 1.95 | 0.349 |
| ED03 | 50.78 | 0.808 | 14.50 | 8.45 | 0.152 | 6.23 | 15.25 | 1.93 | 1.61 | 0.268 |
| ED04 | 50.46 | 0.794 | 13.89 | 8.15 | 0.149 | 6.72 | 15.61 | 2.34 | 1.61 | 0.246 |
| ED05 | 49.15 | 0.805 | 13.45 | 8.04 | 0.155 | 6.33 | 17.78 | 1.89 | 1.89 | 0.476 |
| ED06 | 52.08 | 0.789 | 14.12 | 7.75 | 0.136 | 6.68 | 14.09 | 2.14 | 1.92 | 0.255 |
| ED07 | 49.78 | 0.815 | 13.68 | 8.12 | 0.145 | 6.87 | 17.00 | 1.66 | 1.72 | 0.190 |

Tell ed-Dēr : Major Elements

| Sample No. | V | Cr | Ni | (Cu) | Zn | Rb | Sr | (Y) | Zr | (Ba) | (Ce) | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ED01 | 137 | 349 | 266 | 35 | 77 | 53 | 428 | 24 | 142 | 312 | 49 | 100.55 |
| ED02 | 127 | 413 | 242 | 35 | 76 | 45 | 414 | 23 | 146 | 320 | 45 | 100.79 |
| ED03 | 143 | 327 | 255 | 35 | 86 | 36 | 398 | 23 | 141 | 312 | 43 | 101.23 |
| ED04 | 141 | 350 | 266 | 21 | 84 | 35 | 399 | 22 | 138 | 291 | 45 | 100.90 |
| ED05 | 132 | 351 | 248 | 33 | 75 | 37 | 592 | 21 | 142 | 272 | 41 | 100.85 |
| ED06 | 130 | 360 | 250 | 34 | 78 | 43 | 392 | 22 | 140 | 274 | 53 | 100.69 |
| ED07 | 147 | 370 | 259 | 41 | 95 | 58 | 406 | 22 | 142 | 310 | 47 | 102.53 |

Tell ed-Dēr : Trace Elements

| Sample No. | $SiO_2$ | $TiO_2$ | $Al_2O_3$ | $Fe_2O_3$ | MnO | MgO | CaO | $Na_2O$ | $K_2O$ | $P_2O_5$ |
|---|---|---|---|---|---|---|---|---|---|---|
| Ni01 | 51.97 | 0.779 | 13.30 | 7.70 | 0.140 | 6.98 | 16.64 | 1.60 | 1.61 | 0.254 |
| Ni02 | 50.22 | 0.792 | 13.33 | 7.99 | 0.139 | 7.32 | 16.86 | 1.89 | 1.17 | 0.248 |
| Ni03 | 50.89 | 0.776 | 13.59 | 7.46 | 0.135 | 6.68 | 16.25 | 1.59 | 2.17 | 0.441 |
| Ni04 | 51.97 | 0.791 | 14.53 | 7.88 | 0.141 | 6.95 | 13.94 | 1.53 | 1.83 | 0.396 |
| Ni05 | 47.85 | 0.797 | 13.02 | 7.84 | 0.138 | 8.69 | 17.93 | 2.13 | 1.35 | 0.221 |
| Ni06 | 49.25 | 0.718 | 12.88 | 7.94 | 0.139 | 8.80 | 16.19 | 1.10 | 2.18 | 0.778 |
| Ni07 | 48.18 | 0.712 | 12.10 | 7.09 | 0.130 | 7.65 | 21.09 | 1.33 | 1.23 | 0.455 |

Nippur : Major Elements

| Sample No. | V | Cr | Ni | (Cu) | Zn | Rb | Sr | (Y) | Zr | (Ba) | (Ce) | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ni01 | 130 | 371 | 257 | 13 | 72 | 26 | 337 | 23 | 135 | 231 | 46 | 99.37 |
| Ni02 | 140 | 382 | 265 | 21 | 81 | 19 | 318 | 24 | 137 | 227 | 40 | 101.14 |
| Ni03 | 126 | 335 | 248 | 23 | 84 | 42 | 429 | 23 | 138 | 283 | 52 | 99.40 |
| Ni04 | 141 | 296 | 268 | 49 | 102 | 48 | 336 | 25 | 137 | 297 | 57 | 101.07 |
| Ni05 | 145 | 309 | 254 | 29 | 93 | 24 | 635 | 21 | 143 | 305 | 37 | 100.71 |
| Ni06 | 141 | 280 | 264 | 67 | 112 | 52 | 423 | 21 | 126 | 254 | 41 | 100.59 |
| Ni07 | 107 | 343 | 236 | 34 | 90 | 29 | 593 | 20 | 134 | 279 | 28 | 100.68 |

Nippur : Trace Elements

| Sample No. | $SiO_2$ | $TiO_2$ | $Al_2O_3$ | $Fe_2O_3$ | MnO | MgO | CaO | $Na_2O$ | $K_2O$ | $P_2O_5$ |
|---|---|---|---|---|---|---|---|---|---|---|
| Is01 | 47.00 | 0.694 | 11.27 | 6.48 | 0.120 | 7.85 | 23.67 | 1.47 | 1.20 | 0.202 |

Isin : Major Elements

| Sample No. | V | Cr | Ni | (Cu) | Zn | Rb | Sr | (Y) | Zr | (Ba) | (Ce) | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Is01 | 108 | 348 | 206 | 19 | 77 | 35 | 710 | 19 | 137 | 329 | 45 | 99.41 |

Isin : Trace Elements

Table 1. Major and Trace Elements : Pottery from Tell ed-Dēr, Nippur and Isin.

## 4.2. Pottery Technology

### *Hand-Forming*

*Shape*. The shape of handmade vessels is irregular in general.

### *Wheel-Throwing*

*Shape*. In contrast to the irregular shape of handmade pottery, the form of vessels thrown on the fast wheel is generally symmetrical.

*Throwing Spiral*. The throwing spiral is a pronounced screw-like groove often visible on the interior of a vessel, the result of pulling the clay with the fingertips or knuckles from centered and opened clay during the forming of a vessel on the fast wheel.[347] In this process the potter firmly moves his hands upwards without deviating sideways. It must be noted, however, that it is not always necessary to make a vertical movement to raise the wall. If the clay does not have much resistance, the wall can be lifted by pressure only. The throwing spiral gives information about the direction of the rotation of the potter's wheel, the consistency

346 MÉRY and SCHNEIDER 1996.

347 Besides ceramic surface features, microfabrics are also helpful for the identification of wheel-throwing, see COURTY and ROUX 1995.

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of the clay and the throwing speed, in relation to the vertical movement of the hands. When the throwing spiral is rather dense, one may conclude that a light, fast-rotating wheel was used. Once the base was made, the potter could rapidly and smoothly pull up the clay. Not much pressure was needed to make a thin wall. The only obstacle was the occasional presence of hard undissolved clay particles in the clay. These can be identified as thicker spots in the wall. Sometimes they might even cause cracking during the throwing process.

*Throwing Ridges*. In contrast with the screw-like throwing spiral, the throwing ridges run horizontally parallel to each other. The ridges are the result of pressing the fingers, rib or sponge slightly against the clay during throwing. These ridges are less pronounced than the throwing spiral and are visible as small lines in the skin of the self slip.

*Direction of Rotation of the Potter's Wheel*. Unless the fast wheel is constructed in such a way that it can only rotate in one direction, both directions are possible. However, the potter will usually not alternate the direction each time he throws a pot. This may be compared with right- or left-handed writing. The potter will continue to rotate the wheel the way he learned in his youth. The rotation direction is part of the potter's tradition. Different directions may indicate different pot-making traditions. The rotation direction can be deduced from the direction of the throwing spiral. If the vessels were thrown from the cone, the traces of the twisted wire that was used to cut the vessels from the cone are also indicative. Furthermore, the way in which the relatively large non-plastic grains are embedded in the clay gives also information on the rotation direction of the wheel, especially when a rib was used during the throwing process.

*Self Slip*. While throwing a vessel on the fast wheel, the potter always moistens his hands with water. This results in a slip layer, referred to as a self slip on the surface of the vessel, which acts as lubrication so that the rotating soft clay can easily slide through the potter's fingers. This slip layer is one of the characteristics of the throwing process. It is a finely textured coating of the same material that constitutes the clay body of the vessels. The layer of self slip may be removed during smoothing or scraping afterwards. As opposed to the self slip layer, a slip or engobe, applied to a vessel by dipping, brushing or pouring, is a finishing technique that was not found in the second-millennium pottery repertoire.

*String-cut Base*. Wheel-thrown pottery is usually cut from the wheel or cone with a string or twisted wire. This leaves various cutting-off marks on the flat bases (e.g., Plate 22 : 3).[348] Straight parallel grit drag-marks indicate the vessel was stationary. Curved parallel grit drag-marks indicate that the vessel was slowly turning. The bases of vessels that were cut while the wheel was still revolving rapidly show a spiral pattern. In contrast with a straight wire, a twisted wire prevents the newly formed vessel from sticking to the cone of clay again. The cutting-off marks are only found when the base of a vessel was not further finished afterwards.

*Throwing in Stages (Coils or Cylinders)*. Tall vessels, which cannot easily be thrown from a single piece of clay, are usually made in stages. The potter throws his vessels in parts, using coils or preformed cylindrical sections. Occasionally, he will stop the throwing process to let the clay dry before being able to build the vessel higher up. It is difficult to uncover the joints of the coils or cylinders. In some cases the joints are recognizable as irregularities of the wall. The joints form weak places. During usage, the vessels will easily crack in these spots. The joints of prefabricated cylinder parts are sometimes strengthened by an appliqué decoration on the outside of a vessel. Although the traces of the joints are not often obvious, a ceramist – because of his practical experience – can easily determine whether a vessel was thrown in stages, considering the size of the vessel and the workability properties of the clay that was used.

*Pottery Thrown from the Cone*. The size of pottery thrown from the cone is generally limited. This technique was used for small and medium-sized bowls, cups and goblets. The tall goblets, in particular, are more or less asymmetrical. This asymmetry is the result of the forming technique. After pulling the wall upwards, the lower part of the wall was constricted in order to make a small base. Because this was done very fast in relation to the throwing speed, the goblets became asymmetrical. They would have even collapsed if the potter, while constricting the base with one hand, had not been supporting the upper part of the wall with his other hand. The asymmetry can also be the result of throwing the goblet from a cone of clay that was not centered exactly, which is characteristic for a fast and not very careful production method.

The very characteristic profile of the base and lower part of the wall was caused by the strong constriction of the lower part of the vessel at the end of the throwing process. Since the clay was pressed inward, the wall thickness increased in this part of the vessel. At the same time, a screw-like pattern was developed by torsion, most apparent on the vessel's interior. The constriction also gave the vessel a more curved profile. The torsion marks were the result of slowing down the rotation of the vessel in the opposite direction of the rotation of the wheel.

*Traces of Lifting the Vessels up from the Wheel or Cone*. After a vessel had been thrown, the potter cut it from the cone or wheel-head (see *String-cut Base above*). To limit the deformation of the still very soft clay of the vessel as much as possible and to avoid having his hands stick to the clay, the potter lifted the vessels up between his fingertips, as shown by traces of the fingers. Heavier and wider vessels had to be lifted up between the palms of the hands. Vessels made on bats (larger forms and vessels with a flat base) were put aside to dry standing on the bat. They were lifted up from the bat as soon as they were leather-hard. Consequently, they do not display much deformation from having been lifted up.

### *Finishing*

*Scraping Traces*. If the potters were satisfied with the quality of the vessels as thrown or hardly any improvements were necessary, they did not apply many finishing treatments, such as scraping or decorating. Scraping traces, however, are often visible in the second-millennium pottery repertoire. As soon as the vessels were leather-hard, the base and lower part of the wall were usually scraped with a tool, mostly on the outside. The pattern of the scratches shows whether this was done by hand or on a rotating wheel. In some cases the scratches were partly wiped away as a result of smoothing the vessel surface by hand or with a piece of leather. The large jars were scraped by hand on the inside. One must keep in mind that the potters could not scrape the inside of narrow-necked closed forms. For this reason the throwing ridge is always clearly visible on the inside of the narrow goblets.

*Finishing the Rim*. Since folding requires fat clay, the Mesopotamian potters generally made straight unfolded rims. Only the rims of some large hand made vessels were thickened. However, these rims were made of applied coils of clay.

### *Decoration*

*Bitumen Painted Decoration*. The initial identification of the matte, fugitive black pigment as an organic material (bitumen)

[348] See also RYE 1981, figs. 63 and 64.

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was confirmed by means of re-firing sherds, during which the paint disappeared.[349]

*Drying*

The drying process itself does usually not leave any observable marks. Vessels that develop serious drying (and firing) cracks would have been discarded. Only minor cracks and traces of repairing or efforts to prevent drying cracks are visible when the cross-section of a base is examined. The presence of scum can give information of the position of vessels during drying and firing.

*Scum Formation*. Scum formation as a fading factor is a phenomenon that frequently occurs in second-millennium pottery. Components such as NaCl, $CaCl_2$, $MgCl_2$ etc., which emanate from the clay and are soluble in water, are deposited at places where the water evaporates during the drying process. On the surface, especially on protruding parts, there is an accumulation of similar components. With closed shapes this does not happen or it occurs to a lesser extent on the inner surface. Subsequently, during the firing process, chemical reactions take place. When, for example, there is calcium on the surface, this can react with sulfur fumes that are present in the burning gases and thus form gypsum. In the same way a scum of magnesium sulfate can be formed which, unlike the gypsum scum, is soluble in water. In Mesopotamian pottery the presence of a light-colored surface can be the result of either type of scum or a mixture of both.

*Firing*

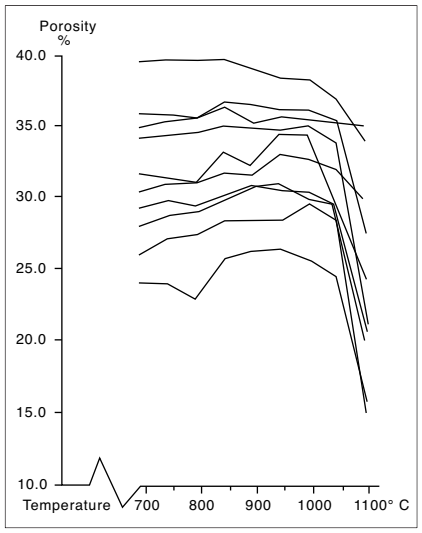


Fig. 36. Ten sherds from Tell ed-Dēr : diagram of the apparent porosity percentages. In most cases a sharp decrease in porosity occurs around 1050° C.

The porosity of more than 120 sherds found at Tell at Dēr was measured after firing under controlled conditions at 50° C intervals. Graphs were made of these measurements. Ten of these are represented in Fig. 36. This figure shows that the average porosity of the sherds lies between 20% and 40%. It is also quite clear that, in most cases, there is a sharp decrease in porosity at around 1050° C. This must be contributed to the high calcium content of the clays and the well distributed form in which calcium occurs. The calcium silicates that have been formed are the cause of an early sintering of the sherds above 1050° C. Due to this, the faded pottery turns to a light olive green color, which becomes darker and darker as the temperature rises. Eventually deformation of the sherds occurs at around 1150° C. By then the color is dark olive green. That these temperatures were reached in the Old Babylonian and Kassite Periods is apparent from the fact that some spots were found which had a light green to olive green color. Completely deformed misfires with a dark olive green color were occasionally found too.

## 5. An Ethnoarchaeological Note

Ethnoarchaeology is considered to be a useful discipline for ceramic research in archaeology.[350] Ceramic ethnoarchaeology involves investigations into the activities of traditional potters and a study of the interaction of factors playing a part in the pottery production process that help to interpret phenomena observable in ancient pottery. Long-term studies are designed to address a variety of specific issues, such as distribution of the ceramic products and use-life of pottery, leading to a better understanding of the importance of the potter in the social and economic life of a community.[351] Short-term visits usually enable the recording and documentation of a few aspects of the pottery production sequence.[352]

This ethnoarchaeological note is based on short visits we paid in 1985 and 1986 to the potters and brick-makers northeast of Al Thawra (situated northeast of Baghdad) along the road to Baquba. Our interpreter was Mohammed Mursjed, the representative of the Iraqi Department of Antiquities during the excavations at Tell ed-Dēr in those years.

We began our visits in a shop in Baghdad where pottery was displayed for sale (Fig. 37). The salesmen told us where the vessels were being made. One could not miss the potteries and brickworks. From a far distance one already sees the black smoke blowing from chimneys of the many kilns (Fig. 38). The soil of the wide region in which the pottery workshops and brickworks are located varies from clay to loamy sand. The brick-makers were not precise in their raw material selection. The bricks of the brickyards are of bad quality. They are soft, brittle and not able to stand up to moisture and frost. The softness of the bricks is probably caused by a combination of a relatively low firing temperature and the presence of salt in the clay.

Fig. 37. Pottery displayed for sale in a Baghdad shop.

349 Through chemical analysis and comparison with known reference samples from modern locations of bituminous sources in the Near East it is possible to indicate the source areas, see Connan *et al*. 2004.

350 David and Kramer 2001 ; Kramer 1985 ; Longacre 1991 ; Stark 2003.

351 E.g. Annis 1996, 2007 ; Kramer 1997 ; London 1991 and 1998-99 ; Longacre and Skibo 1994.

352 E.g. Jamieson 1993-94 ; Matson 1995 ; Salem 1998-99 ; Van As *et al*. 2010.

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Fig. 38. Potteries and brickworks located northeast of Baghdad.

Fig. 39. Stretching traces easily occur in the not very cohesive local clays used by the potters northeast of Baghdad (see also Fig. 27).

Fig. 40. Soaking clay in a shallow pit.

The local clays used by the potters are neither very plastic nor very cohesive (Fig. 39). Consequently, stretching traces easily occur and the pots are prone to crack during the drying process. After soaking the clay for 24 hours in a shallow pit to which water from a well is supplied through a dug-out gully (Figs. 40 and 41), the potters added fibrous material in the form of seed fluff of great mace (*Typha latifolia*) to enhance the coherence of the clay and its resistance to tearing (Fig. 42). Although the traces of *Typha latifolia* cannot be observed in the excavated ancient pottery, we may assume that the potters in the second millennium BC prepared the clay in the same way since they used the same sort of clay. Furthermore, in those days, reed mace is known to have grown on the borders of the Euphrates and Tigris. Nowadays, studio potters prefer clay tempered with fibrous materials, like paper clay, because of its excellent technical properties.[353]

Most of the potteries we visited produced water jars (Fig. 43). These water jars were made in two stages. First, the lower parts were thrown and put outside to dry in the sun. After drying, the lower parts of the jars were brought inside again, and the potter fixed the still incomplete jar on the wheel-head with a lump of clay (Fig. 44). Next, the upper part was thrown in three coils up to the rim (Fig. 45). The outside was scraped and finally decorated with a roulette wheel. Before firing the jars were put outside to dry (Fig. 46). According to one of the potters, 80 water jars were made in his workshop every day.

Fig. 41. Well used by the potters northeast of Baghdad.

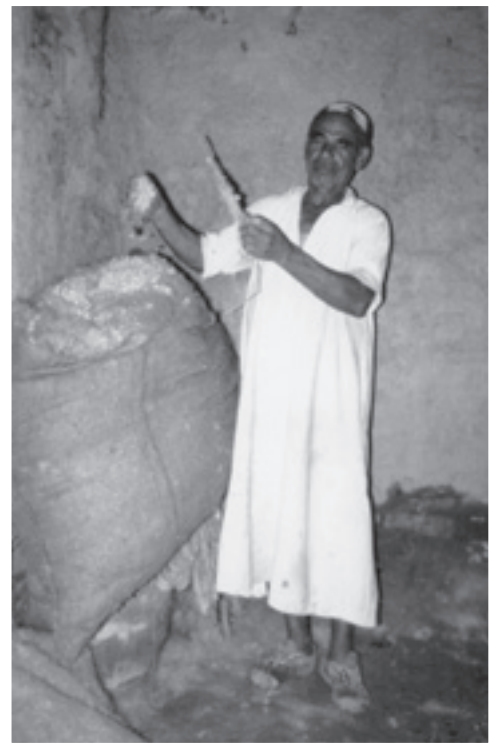

Fig. 42. Fine fibrous tempering material (*Typha latifolia*).

The pottery was fired in closed chamber kilns (Fig. 47). Like for the kilns of the brick-makers, crude oil was used as fuel. This

353 GAULT 1995 ; VAN DER PLAS L. and VAN DER PLAS M.L. 1997.

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Fig. 43. Water jars produced by most of the potters northeast of Baghdad.

Fig. 44. Throwing the upper part of a water jar in three coils up to the rim.

Fig. 45. Adding a coil while throwing the upper part of a water jar.

Fig. 46. Water jars drying outside in the sun.

Fig. 47. Closed chamber kiln.

is not surprising because Iraq is an oil-producing country where in some areas the oil is under such pressure that it comes up to the earth's surface by natural means. The potters continuously scooped the crude oil from a hole in front of the firing chamber into the fire with help of a bowl or soup ladle (Fig. 48).

Since the use of oil products was known in ancient Mesopotamia[354] we wonder whether crude oil could not have been used by the Mesopotamian potters. On the other hand, shrubs and dead palm leaves could also have been used. We used this kind of local fuel in a small experimental updraft roofed kiln built of

354 FORBES 1964.

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stones daubed with clay. A temperature of ca. 900° C was measured after ca. three hours firing.[355] However, since only wall stubs normally survive for ancient kiln chamber, whether or not they were permanently domed is an open question.[356]

Fig. 48. Scooping the crude oil from a hole in front of the firing chamber into the fire.

## 6. The Form, Function, Use and Manufacturing Technique of a Ceramic Vessel

In classical archaeology, Attic pottery is classified in a number of shapes : amphora, pelike, krater, lekythos, kylix, etc.[357] The ancient Greeks used these names for the vases that were made for actual use. The different shapes corresponded to the functions they performed. In our days, we also use, like the Greeks in antiquity, different vessel names in relation to their function : bowl, jar, jug, etc. These names are likewise used in archaeological pottery classifications.[358]

A classification is the ordering of objects in groups based on the their degree of similarity with another ; classifications of pottery may be folk classifications or devised classifications.[359] In folk classifications the entities are grouped and named according to elicited native categories (as distinguished from devised classifications).[360] The native terms for pottery vessels known from ethnographic research are mainly based on projected use or intended techno-function.[361] Thus, vessels are usually not so much categorized on technological criteria (decoration, color, surface treatment etc.) as named for their general functions, such as cooking, storage, or serving. The vessel names in folk classifications often indicate several aspects of pottery simultaneously : size, shape, specific function and contents.[362] The implications of the findings of studies of folk classifications for pottery among traditional societies are relevant to the objectives of archaeological pottery classification.[363] However instructive folk classifications may be, archaeologists will never be able to classify their excavated pottery according to the original native classification criteria. They are forced to make a devised classification, i.e. a formal scheme of categories of entities developed by and used within a particular scientific discipline to order a set of data.[364] Different methods for ordering objects by classification and grouping procedures can be distinguished.[365] Without entering into the theory of classification, we may say that every devised classification is correct, insofar as the chosen classification criteria applied are indicated and related to the purpose of the classification. In other words, first the questions to be asked and the aim of the classification have to be formulated. Next, the ordering criteria must be established.

For a long time, archaeological ceramic studies were focused on finding an answer to the questions 'when ?' and where'.[366] Many examples can be given of pottery classifications that were made for dating and comparative purposes. The most common criterion for such traditional or intuitive classifications or typologies[367] in Near Eastern archaeology[368] is the vessel's shape, starting from the idea that form is the essence of a ceramic vessel.[369] The form is usually expressed in words that indicate the intended techno-function.[370] In the introduction of Duncan's *Corpus of Dated Palestinian Pottery* Flinders Petrie says,

> "As in an index the first requirement is ready reference, so here all other considerations have to give place to a uniform system by distinguishing types. To this end, the order is from the most open forms, such as plates to the most closed forms, such as bottles".[371]

The techno-function includes another aspect that influences the shape of earthenware vessels. Here, we refer to the different ways of using and carrying pottery.[372] A well-known example hereof is the water jar (tinaja) in highland Guatemala that occurs in different shapes in the various regions of the country that are related to the different modes of carrying the jars (on the head, resting on the hip, or on the back).[373]

In view of the close relationship between shape, function and use, it is not surprising to find combinations of morphological and functional denominations in archaeological pottery classifications.[374] Some investigators are of the opinion that the function is the most influential aspect for determining, and constraining, the final shape of a vessel.[375] According to Bruijn (1979), in a chapter on the relationship between shape and function of medieval pottery from Utrecht in the Netherlands, the elementary functions of pottery (cooking, pouring, storage etc.) can often be concluded from the measurement ratios of the various pots. It should be noted, however, that the indication of the function usually only serves to give a label to a class of pottery. It is not based on the identification of 'actual use' through scientific analysis of traces of use found in and on the ceramic material.[376]

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355 Van As and Jacobs 1985, 20.

356 Moorey 1994, 150.

357 Boardman 1974 ; 1975.

358 For concordances of vessel-shape terms in the modern languages see : e.g. Balfet *et al*. 1983 ; Yon 1981.

359 Rice 1987, 473.

360 Rice 1987, 277-282, 476.

361 The techno-function refers to an artifact's utilitarian role (in contrast to the socio-function and ideo-function), see Skibo 1992, 35-42.

362 See references in Rice 1987, 278, 279.

363 Cf. Kempton 1981 ; Miller 1985.

364 Rice 1987, 475.

365 Dunnell 1971.

366 The so-called typological phase of the history of pottery studies, Orton *et al*. 1993, 3-22 ; Van der Leeuw and Pritchard 1984, 3-15.

367 For various approaches to pottery typology, see Sinopoli 1991, 49-56.

368 In the late 1950s the type-variety system for dating and comparative purposes was developed in North America, Wheat *et al*. 1958.

369 For a philosophical discussion of this idea, see Franken 1989-90 ; Franken 1995.

370 According to B. Hrouda, the German language has developed a clearly defined unambiguous terminology for the function of pottery types, which can be used for archaeological pottery classification : *Teller*, *Schale*, *Napf*, *Schüssel*, etc. (B. Hrouda, pers. comm.).

371 From Sir Flinders Petrie's introduction to Duncan 1930.

372 Distinction between the function (functional qualities) and use of a vessel, see Annis 1985.

373 Reina and Hill 1978, 242.

374 For the relationship of these aspects, see e.g. Aronson *et al*. 1994 ; Henrickson 1990 ; Henrickson and McDonald 1983 ; Smith 1985 ; Woods 1986.

375 E.g. Miller 1985 based on Saraswati and Behura 1966 and Birmingham 1975.

376 For the present state of affairs in this kind of studies see Evershed 2008 ; Evershed *et al*. 1992 ; Oudemans 2006 ; 2007.

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Several attempts have been undertaken to give a solid basis to the various classes of a devised pottery classification by designing vessel contour classifications and geometric or volume classifications.[377] These systems are made to standardize the form terminology like bowl and jar. Their aim is to allow for an adequate, general cross-cultural comparison of vessel morphology.

Since the 1960s, in the so-called contextual or explanatory phase of the history of pottery studies, archaeological ceramic studies are focused on finding an answer on the questions 'how ?' and 'why ?'[378] For this reason, technological analysis is an important component of archaeological ceramic research. Pottery is considered to be an ecological and socio-cultural product par excellence, enabling us to use pottery for solving problems related to social organization and human behavior.[379] The opening sentence of Frederick R. Matson's contribution to *Ceramics and Man* "Unless ceramic studies lead to a better understanding of the cultural context in which the objects were made and used, they form a sterile record of limited worth"[380] is often quoted to emphasize that the study of excavated pottery must result to knowledge of what is called in pre-Columbian archaeology 'the Indian behind the pot'.

In our study of the second-millennium pottery we have tried to analyze the raw materials and manufacturing techniques. The objective was to explain why a pot made in antiquity has its shape, or color, or hardness or whatever one sees when one is looking at it.[381] As to the relationship between form and technique, we note that various differences in shape (such as more or less protruding rims) are not important from a potter's point of view. It will be evident, that, even if a vessel is made by means of using a production method in which the same type of pot is always thrown out of an equal amount of clay, minor individual differences will always occur. One should bear in mind that a pot produced later in the day will be somewhat different from a pot made several hours earlier, as can be seen either from observation of present-day potters, or by experiment. The reason for this is that by the end of the day, the clay is much drier, which has an effect on its workability properties, so that the later pots will probably look a bit stubbier that the first ones. Concerning similarity in shape, we may notice that similar shapes may have been made in completely different ways, because they may originate from completely different pot making traditions. In a morphological classification these technically distinct types would be grouped into one single type. In the context of the second-millennium pottery, we may mention the method of strengthening a base, if any, and the shape of a base are not the same thing. Bases of greatly differing sizes and shapes could be made following the same technique (see Pls. 10 : 3 and 96 : 13), while bases of the same shape might be made in different ways (see Pl. 62 : 8 to 10).[382]

## 7. Summary and Conclusions

The purpose of our technological study has been to give the reader an impression of the work of the Babylonian potter in the second millennium BC (Ur III through Isin II Periods), his environment, the clay he used and the manufacturing techniques he applied. We also believe that through the technological analysis of the pottery it might be possible to trace the technological evolution through the middle centuries of the millennium. We have also tried to explain the pottery shapes from a potter's point of view. The results are mainly based on the analysis of pottery from Tell ed-Dēr, Sippar, Nippur, and Isin. The research covered microscopic fabric analysis, the reconstruction of the manufacturing technique based on characteristic features, experiments and ethnoarchaeological observation.

Technologically speaking, the pottery studied here is not a highly sophisticated product. It has all characteristics of fast-produced, standardized handmade and wheel-made consumer ware. In general it is not decorated and is of a relatively uniform pale buff color. The potters used the available alluvial clay without much preparation. The clay was rather short and tended to tear during the throwing process. In order to improve the clay's cohesive strength, the potters added fibrous organic material.

The bases of the goblets and other categories of thrown pottery that were thick in relation to the wall had the tendency to crack during the drying process. The cracks were repaired prior to firing or measures were taken to prevent these cracks, employing clay that was tempered with much vegetal matter. The organic fibers kept the clay together, by which the resistance against cracking during drying did increase. The pottery has the characteristics of having been fired in a kiln. Although we do not have conclusive arguments, it is possible that the second-millennium potters, like the present-day potters northeast of Baghdad, used crude oil as fuel for their kilns.

Having looked at the pottery from the sites included in the research project, we may conclude that in general the same manufacturing techniques were used in all locations. Chronologically, there are no large changes in the technological pottery tradition during the second millennium BC. In the course of time, the only important change seems to be in the development of techniques for dealing with the tendency of bases of wheel-thrown vessels (particularly goblets) to crack during the drying process prior to firing. Two preventative strengthening methods could be identified : "plugged" and "filled-in". The earliest attested plugged base comes from southern Babylonia during the Isin-Larsa Period (Pl. 111 : 7). Plugged bases come from both northern and southern Babylonia during the Early Old Babylonian Period (Pls. 61 : 1 and 58 : 6). The filled-in base is not securely attested until the Late Old Babylonian Period (Pl. 62 : 10).[383] It is only in the Kassite Period that the potters preferred filled-in bases.[384] By applying this preventative-strengthening technique, the Kassite potters could produce goblets in great numbers very quickly, while being able to minimize the otherwise almost unavoidable tendency of their thick bases to crack.[385]

Summarizing, we may conclude that from the potter's point of view not many pottery classes or types can be distinguished.[386] Each technological pottery type usually includes a large number of shape variants.[387] Archaeologically, the various shape variants are important for insight into changes (or continuity) over time and the geographical distribution of pottery assemblages. Archaeologists and technologists do not always ask the same questions and therefore do not necessarily find answers that are mutually comparable. However, our search for the Babylonian potter in the second-millennium BC, with his environment, clay and techniques, provides a solid support for the morphological classification of his pottery for dating and comparative purposes.

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377 Castillo, Tejero and Litvak 1968 ; Ericson and Stickel 1972 ; Shepard 1956, 224-248.

378 Orton *et al.* 1993, 13-22 ; Matson 1984 ; Van der Leeuw and Pritchard 1984, 3-15.

379 Matson 1965.

380 Matson 1965, 202.

381 Franken 1983, 1-2.

382 Pons 1989, Pl. 6 : 6-9.

383 *MHEM* 4, 28.

384 Van As and Jacobs 1988, 2.

385 Van As and Jacobs 1987, 47-49.

386 A technological class or type of pottery defined as a group of earthenware vessels made of the same raw materials and produced in the same forming, finishing and firing technique.

387 The number of shape variants depends on whether the archaeologist is a 'splitter' or a 'lumper'.

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# FINAL REMARKS

## New Dates for Previously Published Material

In presenting the pottery of the 2nd millennium, we have occasionally found it necessary to redate finds and levels from published excavations.[388]

We have proposed alternative dates for several of the 2nd-millennium levels at Tell Yelkhi in our discussion of that site's stratigraphy above.[389] As we have explained there, these chronological adjustments are based on our dating of the Babylonian pottery found in those levels.

Following the redating of Tell Yelkhi, the dates of the later levels of the Kititum Temple at Ishchali have also been changed. The excavators assigned Kititum III and IV to the Late Larsa Period (18th c. NLC), indicating that Level IV probably extended into the Old Babylonian Period (17th c. NLC).[390] There is not much published pottery from these levels, but bottles belonging to our Group 150 $A_2$ (Pl. 78 : 11 and 14) are present. These are highly diagnostic for the 17th and early 16th centuries. Kititum III and IV also yielded so-called Diyala goblets,[391] which we date at Tell Yelkhi to the late 17th and early 16th centuries (Yelkhi Levels IV-III). We have therefore placed Kititum III and IV broadly in the 17th and 16th centuries.

Regarding the Sînkāšid Palace at Uruk, the Warka team[392] accepted a later occupation of the palace and therefore its possible destruction by Samsuiluna, not Rīm-Sîn I, as a result of the synchronism Rim-Anum/Samsuiluna established by DEJONG ELLIS in 1986.[393]

Comparisons between the pottery from other sites and the pottery found on the floor of the Sînkāšid Palace and in its destruction layer confirm a date for its destruction near the end of the Old Babylonian occupation of Uruk. This date must also be close to the final abandonment of all the southernmost cities of Babylonia during Samsuiluna, year 12. Vessels from the floor and the destruction layer of the Sînkāšid Palace are mid-17th century NLC in date, where they belong without question ;[394] they are not from the era of Sînkāšid.

## A Brief Survey of the Babylonian Ceramic Tradition in the 2nd Millennium

*Ceramic tradition* refers to the customs and manufacturing techniques that lie behind, and are revealed in, the shapes and technical features of vessels produced in large quantities by professional potters.[395] The majority of shapes in this guide were produced by professional potters using a potter's wheel. The vessels were always in demand. The high level of production needed to meet this demand meant that the shapes of these vessels became increasingly standardized, as did the techniques by which they were made. Mass production also ensured that the evolution of these shapes remained uniform across a relatively broad region. In other words, mass production tended to reinforce the uniformity of the tradition. At the same time the tradition did not remain static. It was continuously evolving as shapes changed and the production techniques improved over the centuries. This was certainly the case in Babylonia during the 2nd millennium.

### The 20th Century (Ur III Period)

*The Common Babylonian Tradition*[396]

The Babylonian potters of the 20th century were continuing in the tradition of their 3rd-millennium predecessors. Several vessels represent the ongoing production and evolution of 3rd-millennium forms. As the *Comparanda* demonstrate, the straight-sided bowls of Groups 10 $A_1$ and 10 $E_1$, the small carinated bowls of Group 20 $E_1$, the small convex-based vessels of Groups 130 $A_3$ and 130 $B_3$, and the jars of Group 255 $A_2$ all have earlier connections. The small bottles of Group 185 $A_3$ also have 3rd-millennium antecedents.[397] It is clear that there was no break in the pottery-making tradition from what had come before.

Shapes that are more-or-less limited to the 20th century include the tall, cylindrical jars of Group 110 $A_2$ and their wider counterparts in Groups 110 $B_1$ and 110 $B_2$, as well as the globular and near-globular jars of Groups 240 $B_2$ and 240 $C_{2\ \&\ 3}$.

On the other hand, the small carinated bowl, Group 20 $E_1$, endured for nearly three centuries, from the 20th century to sometime before the end of the 18th. This is the most common bowl of the early 2nd millennium in Babylonia. Besides the main group, we have identified a number of variant shapes. For example, the vessels of Group 20 $D_1$, which may have served as lids, seem to have been produced only at sites near Nippur, in the northern part of the Southern Alluvial Plain, and there only in the 20th and 19th centuries.

The round-bottomed cooking pots of Group 55 $A_3$ lasted even longer than the small carinated bowls. These are attested in the 20th century and continue until the 16th century, having the same generally globular shape from the beginning to the end of this time-range. The conservatism of this form is not surprising, as

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388 This redating is unrelated to the Middle Chronology/New Low Chronology discussion. We are dealing here with the need to modify the dates of levels, irrespective of the chronological system being used, based on the materials, particularly pottery, found in those levels.

389 See the chapter Key Stratigraphic Sequences, *sub* Tell Yelkhi.

390 *OIP* 63, Table III.

391 *OIP* 63, Pl. 184 : C.547.720 ; our p. 40, fig. 9.

392 BOEHMER (1991, 470), VAN ESS (1991b, 204) and SANATI-MÜLLER (1989, 226). In previous articles, SANATI-MÜLLER (1988, 472) and VAN ESS (1988a, 321-326 and 366) attributed the destruction of the Palace to Rīm-Sîn I, as had been generally believed since FALKENSTEIN (1963, 39).

393 The destruction of the city could be the result of the punitive expedition of Samsuiluna against Uruk and Ur in the 10th year of his reign, as mentioned in the date-formula of year 11 (see already GASCHE 1989, 129).

Fourteen years later CALVET *et al.* (2003, 329), when analyzing contemporaneous pottery from Larsa, also came to the conclusion that the pottery from the Sînkāšid Palace "*cause des problèmes de chronologie*."

394 The pottery from the floor and the destruction layer of the Sînkāšid Palace (Stratigraphic Units 3 and 4, respectively) illustrated here includes the following typical 17th-century shapes: platters, Pls. **2** : 25 (Group 5 $B_1$), **5** : 4, 9 and 16 (all Group 5 $C_1$), and **9** : 6 (Group 5 $D_2$) ; bowls, Pls. **13** : 2 (Group 10 $B_1$), **14** : 7 (Group 10 $B_2$), and **42** : 6 (painted, Group 25 $A_2$) ; and jars, Pls. **80** : 2 (painted, Group 160 $A_2$), and **81** : 5 (Group 165 $A_2$) and 8 (painted, Group 165 $A_2$). We have included additional 17th-century pottery from the palace in this study, but it cannot be linked confidently with either the floor of the palace or the destruction layer above it. Two goblets (Group 90 $A_2$) from the destruction layer, not illustrated here, have been published by VAN ESS (1988a, figs. **36** : 211 and **37** : 215).

395 *MHEM* 4, 30, fn. 141.

396 This heading refers to the pottery that is common to both the Northern and Southern Alluvial Plains.

397 See, e.g., the late 3rd-millennium bottles illustrated in *OIP* 78, Pl. 81 : 1 and *OIP* 129, Pl. 114 : 4-5.

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the vessel's wide-mouthed, round-bottomed shape is very closely tied to its function as a cooking vessel. Technologically, cooking pots are distinctive in that they are made of coarsely levigated clay fired at a relatively low temperature. This made them less likely to shatter when they were placed on a fire or hot coals.

Among the storage jars there are the triangular-rimmed jars of Group 270 E 3 which continued to be produced from the 20th through early 18th centuries. In contrast, the Group 270 F 3 storage jars with elongated rims appear to have been limited to the 20th century.

*Regional Differences*

We do not have enough 20th-century material from the Northern Alluvial Plain to be certain whether or not the ceramic tradition was uniform across all of Babylonia at this time.[398] However, the differences we see between the pottery of northern and southern Babylonia in the 19th and 18th centuries may well have extended back into the 20th century.

*Decoration*

Decoration is not a major feature of 20th-century pottery. However, combing and/or incisions are regularly found on jars, for example, those of Groups 240 B 2 and 240 C 2 & 3, as well as on the small 20th-century vats of Group 265 A 3 (Pl. 120 : 5-10).

*Babylonia and its Periphery*

The most characteristic Babylonian shapes of the 20th century are attested at Susa.[399] The range of shapes – bowls, jars and bottles – shows in its own way that the area – in fact the major part of Elam – was controlled by the kings of the Third Dynasty of Ur.[400] The Babylonian vessels found in the Upper Diyala Basin at the same period may represent a similar situation, though the ceramic evidence is less clear in this case.[401]

In Susa some of the groups, for example, Groups 110 B 2 and 130 B 3, seem to last longer than they do in Babylonia. In these cases we may be seeing the adoption of Babylonian shapes by local potters and their continued manufacture independent of the circumstances in Babylonia.

## The 19th and 18th Centuries (Isin-Larsa Period)

*The Common Babylonian Tradition*

In the 19th and 18th centuries the material available to us increases, and we can clearly see that there is a common ceramic tradition across the alluvial plain. For example, the most frequently attested small bowl of the period, the carinated bowl of Group 20 E 1, is found in significant numbers at every Babylonian site with Isin-Larsa levels. Among other vessels found in both northern and southern Babylonia at this time are the bowls of Group 15 D ; the infant burial jars of Group 35 A 2 ; a widely attested group of spouted vessels (Group 40 A 2) ; basic cooking pots (Group 55 A 3) ; and the distinctive convex-based vessels of Group 135 B 3, which are first attested at the end of the 20th century. Large vessels are also probably common to both regions but have not been adequately recorded due to their size and relative fragility. These include the large bowls of Groups 15 F through 15 H and the very large vats and burial jars of Groups 260 A 2 and 265 A 3.

398 The 20th century is represented in the Northern Alluvial Plain only by the limited exposure at Tell ed-Dēr (see the chapter Key Stratigraphic Sequences, *sub* Tell ed-Dēr).

399 See Groups 20 E 1, 110 B 2, 130 B 3, 135 B 3, 185 A 3 and 255 A 2.

400 See STEVE *et al.* 2002-03, 430-440.

401 See Groups 20 E 1, 110 B 2, 125 A 3 and 255 A 2.

The appearance of tall, slender jars in the archaeological record also deserves mention. As we move from the 20th into the 19th century, the globular jars of Groups 240 B 2 and 240 C 2 & 3, characteristic of the Ur III Period, are no longer being produced. They are apparently replaced by the tall jars of Family 250, which are very typical of Isin-Larsa times. This represents a trend away from squatter, more globular shapes and toward more slender forms with high shoulders and tapered lower bodies.[402]

*Regional Differences*

There are also regional differences between the pottery of northern and southern Babylonia in the 19th and 18th centuries.

For example, Groups 20 A through 20 B 2 are variants of the small carinated bowl, Group 20 E 1, that are found primarily in either northern or southern Babylonia. The well-attested tall jars of Group 250 A 2, found primarily in northern Babylonia between 19th and 18th centuries, and Group 250 B 2, found only in southern Babylonia between the late 20th and 18th centuries, are perhaps best understood as a common form with different rims in the North and South.

Some shapes are found primarily or exclusively in northern Babylonia. There are the bowls of Group 20 I, predominantly of the 19th century, and Group 20 J 2, mainly of the 19th and 18th centuries. These groups have no counterparts in southern Babylonia. Primarily northern bowls are found in Groups 10 F 1 & 2 and 20 B 2, both dated to the 19th and 18th centuries. Among these bowls are some that are well made and well finished, particularly Groups 20 B 2 and 20 J 2. Well-finished bowls are rarer in southern Babylonia than they are in the North during the early part of the 2nd millennium. Other shapes that are found mainly in northern Babylonia include the jars of Groups 100 A 2 and 100 B 2, dating between the 18th and 16th centuries. There are also the ring-based storage jars of Group 270 A 2, primarily attested in the North during the 18th and 17th centuries, and the round-bottomed storage jars of Group 275 A 3, attested principally in the 18th century.

Among the pottery groups found only in southern Babylonia are the related jars of Groups 140 A 2 and 140 B 2, attested in the 19th and 18th centuries, and the distinctive bottles of Family 225, which date between the 19th and 17th centuries. The jars of Group 105 A 2, dating between the 19th and 17th centuries, seem to represent a southern-only variant of Group 105 B 2, which has been found in both the North and South. Round-bottomed storage jars with band rims are also a southern-only form in the 19th and 18th centuries (Groups 270 B 3 and 270 C 3), though by the 17th century, they are also attested in the North in significant numbers.

*Decoration*

As was the case in the 20th century, in the 19th and 18th centuries jars were often decorated with incised lines and combing. Jars in Groups 250 A 2 and 250 B 2 are typical in this regard. The jars of Group 255 A 2 frequently have ridges on their shoulders. The similarly shaped vessels of Groups 255 B and 255 C bear incised lines and/or ridges. Vats and burial jars of Families 260 and 265 are decorated with ridges, rope decoration and/or incised lines. Except for these rather basic attempts at decoration, Babylonian pottery of the early 2nd millennium is largely unadorned.

The principal exception is represented by the gray-ware vessels of Group 135 C 2, which are attested between the end of the 20th century and the early 18th century. These are essentially

402 As another example of this tendency, compare the more nearly globular Pl. 108 : 1 from the end of the 20th century with the more tapered Pl. 108 : 2-3 from about a century later.

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elaborations of the vessels of Group 135 B 3, with which they are contemporary. They are mostly fired to a gray color,[403] which is unusual at any time in 2nd-millennium Babylonia, apart from cooking vessels, like those of Groups 50 A and 55 A 3. Their surfaces are divided into rectangular fields by incised or impressed bands. These fields, in turn, are decorated with white-filled naturalistic (birds, quadrupeds, fish and trees) and/or geometric incised and impressed designs. The vessels of Group 135 C 2 may have been first produced in Susiana. Alternatively, they may have originated in southern or southeastern Babylonia, where they are well attested. They are also found in the Diyala, but only rarely in northern Babylonia.

*Manufacturing Techniques*

There is evidence that early 2nd-millennium potters were confronting the problem of vessel bases that tended to crack during the drying process. Of course, the cracked bases could be patched with coarse clay, and it is clear that the potters did this throughout the millennium.[404]

However, they also tried to deal with the situation preventatively, that is, they tried to take care of the problem before it happened. The first preventative solution attempted by Babylonian potters was the so-called plugged base, where a hole was deliberately left in the bottom of the vessel when it was removed from the wheel. This hole was then filled with a plug of coarsely tempered clay, which would be less likely to crack during drying. The earliest plugged base thus far attested has been identified on a jar of Group 250 A 2 from Larsa (Pl. 111 : 7) in the Southern Alluvial Plain. Unfortunately, this jar cannot be closely dated, but a date in the early 18th century seems appropriate, based on the dates of other jars of the same shape. The plugged base technique seems to have been widely used in the 17th and 16th centuries. Although the latest attested example of a plugged base is found on a small jar dated to the 13th century (Pl. 94 : 7), already by around 1400, the alternative filled-in base had come to characterize pottery of the Kassite Period.

*Babylonia and its Periphery*

Several forms seem to have entered Babylonia from peripheral regions in the early 2nd millennium. The carinated bowls of Group 20 I almost certainly had their origin in the Middle Euphrates Region. They came into the Northern Alluvial Plain, where they were copied by northern Babylonian potters, based on the surviving sherds at Tell ed-Dēr. In similar fashion, the concave cups of Groups 65 C 1 and 65 C 2 probably entered the alluvial plain from the Diyala Basin. Groups 140 C and 145 A 3 may include Babylonian imitations of the so-called grave pots or funerary jars from Bahrain. Finally there are the gray-ware vessels of Group 135 C 2, which, if they are not Babylonian, probably originated in Susiana.

Only relatively small numbers of Babylonian vessels of the 19th and 18th centuries are found in the peripheral regions. However, in Susiana and in the Diyala several Babylonian groups are attested, most notably the small carinated bowls of Group 20 E 1 (Pl. 34 : 35-39) and the convex-based vessels of Group 135 B 3 (Pl. 74 : 12-15). These same groups are also present in the Gulf.[405]

## The 17th Century (Era of Hammurabi and Samsuiluna or Early Old Babylonian Period)

*The Common Babylonian Tradition*

Already during the 18th century shapes were being used that would rise to prominence in the 17th century. Among these are the platters of Group 5 C 1 (Pls. 3 : 24-27 and 4 : 17-19),[406] the carinated bowls of Group 25 A 2 (Pl. 41 : 18-20) and the goblets of both northern (Group 95 A 1 ; Pl. 59 : 9-11) and southern Babylonia (Group 90 A 2).[407]

In the 17th century the evidence of a common Babylonian ceramic tradition is strong. For example, there are the platters (Family 5), particularly those of the main group, Group 5 C 1. Other shapes found throughout Babylonia include the numerous small straight-sided bowls of Group 10 A 1, the curved-sided bowls of Groups 15 A 1 and 15 A 2, the large convex-based bowls of Group 15 H 3, the painted bowls of Families 25 and 30, the cooking vessels of Families 55 and 60, the cups of Groups 65 A 1 and 65 B 1, the painted bottles of Group 150 A 2 and the jars of Group 165 A 2.

After the taller, slimmer and more tapered forms of the Isin-Larsa Period, a return to more globular shapes is signaled by the jars of Group 165 A 2, together with the contemporary jars of Group 165 B 2 and Families 155 and 160.

*Regional Differences*

Northern and southern Babylonia continue to have distinctive pottery groups in the 17th century. For example, in the North new small bowls are introduced, including Groups 20 F 1 and 20 G 1. Neither is attested in the South. Both groups continue into the 16th century, and Group 20 G 1 could well be ancestral to the predominant small bowl of the second half of the millennium, Group 20 H 1.

Southern potters also produced vessels that are not found in northern Babylonia. For example, there are the delicate footed cups of Group 70 B 2, the tall cups of Groups 85 B 1, 85 B 2 and 85 C 2, and the conical vessels of Family 230, all very characteristic of southern Babylonia in the 17th century. The round-bottomed storage jars with band rims of Groups 270 B 3, 270 C 3 and 270 D 3 have a broader range of profiles in the South during the 17th century than they do in the North (Group 270 C 3).

The differences between northern and southern pottery are readily apparent in the jars, globular cups and goblets. While the southern jars of Group 165 A 2 have both short necks (Pl. 81 : 1, 4-6 and 8) and necks of medium height (Pl. 81 : 2-3 and 7) in the 17th century, the northern jars only have necks of medium height (Pl. 80 : 6-9).

The globular cups found in the South tend to have very short necks (Group 170 A 1 ; Pl. 85 : 3-7), while globular cups of Group 170 B 1 (Pl. 85 : 16-18) in the North tend to have necks of medium height. The fine-ware examples of Group 170 D 2 (Pl. 86 : 11-13) have tall necks.

Southern goblets of Group 90 A 2 have reshaped feet and sinuous profiles. On the other hand, northern goblets of Group 95 A 1 have unfinished bases (though reshaped feet begin to appear around mid-century in Group 95 A 2), baggy bodies and constrictions at the base of the neck. Both groups were produced in very large numbers, and both are among the most typical shapes for the 17th century.

403 Exceptions include Pl. 75 : 1 from Tell ed-Dēr (Munsell color 10YR 5/4, yellowish brown) and Pl. 75 : 9 from Susa (*rouge*).

404 E.g., Pl. 62 : 9 and Pl. 101 : 3.

405 See the *Comparanda* for Groups 20 E 1 and 135 B 3.

406 The platters of Group 5 C 1 were already being produced at the end of the 19th century (Pl. 4 : 20).

407 Unillustrated examples of Group 90 A 2 from Nippur can be dated to the 18th century (see Type 39B in *OIP* 78, Table II and Pl. 95 :17, including the comments under Remarks on the facing page).

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*Decoration*

One of the elements common to both northern and southern Babylonian pottery of the 17th century is painted decoration. This decoration is fairly simple, generally consisting of hastily painted lines or strokes in dark (black or brown) bituminous paint arranged in geometric groups. The bowls of Families 25 and 30 are frequently painted in this way and most have ring bases, while the majority of the bowls of the 17th century have unfinished, string-cut bases. Ring bases on bowls seem to indicate an increase in the quality of the vessels. The painted decoration we are describing here seems to represent a further step up in quality.

Individual vessels in other 17th-century groups could also be decorated.[408] All these vessels, both open and closed forms, have ring bases as well. By no means are all ring-based vessels painted, but painted decoration generally is found together with ring bases.

The distinctive, bag-shaped bottles of Group 150 A 2 deserve particular mention. Most of these are painted in the typical 17th-century style. A unique example from Sippar, Plate 77 : 6, includes a horned quadruped in its design. These bottles are equally attested in northern and southern Babylonia and appear along the much of the periphery (especially in the Middle Euphrates and Diyala), as well. They are very diagnostic for the 17th century, and possibly also for the early part of the 16th. We do not know what these bottles contained, but their painted decoration, which is unique among contemporary bottles, suggests that they served a particular function.

Still other vessels – individual vessels, not groups – simply had painted bands around their rims.[409] These are found mostly on drinking vessels (cups and goblets), and to the limited extent they are present, represent a predominantly southern custom.[410]

*Manufacturing Techniques*

As we saw above, the plugged base was being used in southern Babylonia in the 18th century. Around 1700 it appears together with a reshaped foot on a southern Babylonian goblet.[411] Sometime around 1650 both reshaped feet and plugged bases make their first appearance in northern Babylonia.[412] It seems that around the middle of the 17th century southern-style goblet bases were adopted by northern potters for use on their goblets. Until this time the northern goblets only had unfinished flat or stump bases (Group 95A 1). By the 16th century the reshaped foot had become more popular on northern goblets than the unfinished base.

*Babylonia and its Periphery*

Both southern (Group 90 A 2) and northern goblets (Groups 95 A 1 and 95 A 2) appear in peripheral areas. Southern goblets are attested on Failaka in the Gulf. Northern goblets are found along the periphery in the Middle Euphrates, the Diyala, Susiana and even Fars.

In the case of Susiana, it seems that in the 17th-century northern Babylonian goblets with unfinished flat or stump bases (Groups 95 A 1) made their way to Susa and were copied by Elamite potters. These goblets took root and became a characteristic part of the Susiana ceramic assemblage for nearly two centuries, having been found in Levels A XV through A XII *ancien* of the *Ville Royale* (Pl. 59 : 12 and Pl. 60 : 9-11).[413] However, based on the slender, almost biconical shape of the later, 16th-century examples (Pl. 60 : 9-10), it is clear that their morphological development had become a local affair, and they were no longer part of the Babylonian tradition.

Harrâdum (Khirbet ed-Diniye) was established as a Babylonian outpost along the Euphrates in the late 17th century. Along with the local pottery of the Middle Euphrates region, Harrâdum has yielded significant quantities of Babylonian pottery of the late 17th and 16th centuries.

Seventeenth- or 16th-century jars of Group 165 A 2 have been attested on Bahrain and Failaka (Pl. 82 : 7), suggesting that there were connections, probably economic in nature, between Babylonia and the Gulf at this time.

*The Deurbanization of the South*

Returning to Babylonia proper, the southern cities ceased to be urban centers during the reign of Samsuiluna in the latter half of the 17th century. This deurbanization seems to have taken place in two stages, with the cities of the far south being abandoned no later than Samsuiluna, year 12, and the cities of the central alluvium finally collapsing in Samsuiluna, year 30. Whatever else happened as a result of this extended catastrophe, pottery-making as it was practiced in the old cities of the South did not survive. To the extent that vessels were still being made in southern Babylonia after the late 17th century, examples have thus far not been excavated or recognized as such (*MHEM* 4, 7-8 and 30).

## The 16th Century (Late Old Babylonian Period)

*The Continuation of the Northern Babylonian Tradition*

In terms of Babylonian pottery the 16th century belongs to the North. Many forms of the 17th century continue to be produced. Most of the platters of Family 5 are still attested. A number of bowl shapes continue to be made. The small straight-sided bowls of Group 10 A 1 (Pl. 10 : 8-14), which are still the most frequently attested, do not change in form. In contrast, the narrow, straight-sided bowls of Groups 10 B 1 (Pl. 13 : 4-7) and 10 B 2 (Pl. 14 : 1-3) grow taller than they had been in the 17th century.

The medium-sized jars of Groups 165 A 2 (Pls. 82 : 1-2 and 83 : 3-6) and 165 B 2 (Pl. 84 : 1-5) resemble the forms of the 17th-century, though some examples have a slightly narrower profile and less globular appearance (Pls. 82 : 1 and 83 : 4-5) In this way these 16th-century northern jars anticipate the narrower profiles of the jars dating to around 1400 (Pl. 83 : 1-2 and 7-9).[414]

The necks of the globular cups in Groups 170 B 1 are taller in the 16th century than they had been in 17th (Pl. 85 : 13-14), and even taller necks appear on the cups of 170 C 1 (Pl. 86 : 1-3). Taller necks are also a feature of the fine 16th-century cups of 170 D 2 (Pl. 86 : 4-10). These fine cups closely resemble the 14th-century cups in Group 210 A 2 (Pl. 96 : 2-6).

The goblets also continue in production. However, while goblets with unfinished bases (Group 95 A 1) predominate in the 17th century, by the 16th century the most common goblets have shaped or drawn-out feet (Group 95 A 2 ; Pl. 62). The point of maximum diameter is moving higher on the body in the 16th

408 E.g., Pls. **14** : 6, **48** : 2, **79** : 5, **81** : 1, 4 and 8, and **84** : 7.

409 E.g., Pls. **22** : 9, **54** : 6, **57** : 8, 11 and 13, **85** : 3 and 6, and **106** : 1-2.

410 A cup from Harrâdum (Group 65 C 2) is covered with multiple horizontal stripes in red paint (Pl. 54 : 7). This decorative scheme, however, is not typical for Babylonian cups.

411 Group 90 B 2 (Pl. 58 : 6). This example is of uncertain date. For the date of Group 90 B 2 as a whole, see the discussion of the group in the Description chapter.

412 Group 95 A 2 (Pl. 61 : 1-3).

413 See also *MHEM* 4, Pl. 1 : 34-37.

414 A small jar from 16th-century Harrâdum (p. 52, fig. 14) has the higher maximum diameter that characterizes the jars of the 15th/14th centuries.

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century.[415] Some of these 16th-century goblets (Pl. 62 : 7, 9 and 11-12) are approaching the shape of the earliest attested Kassite goblets (especially Pl. 99 : 4), which are about a century later in date (NLC).

Entirely new shapes in the 16th century include the short cylindrical cups of Group 70 A 2, which are very well made, and the large tube-like vessels of Family 80. Both of these are very diagnostic for the Northern Alluvial Plain during the 16th century.

Storage jars of the 16th century still include the round-bottomed Group 270 C 3 with band rim (Pl. 128 : 3). This long-lived shape was first produced in southern Babylonia at around 1900.

*Decoration*

We cannot say exactly when vessels stopped being decorated with designs in dark paint, but it seems to have been early in the 16th century. Tell ed-Dēr and Harrâdum have each yielded single examples of painted whole bowls dated to the 16th century (Pl. 23 : 6 and Pl. 24 : 3). As can be seen, the designs on these bowls are similar. They seem to represent the very end of the painted pottery tradition that was prevalent throughout Babylonia in the 17th century.

*Manufacturing Techniques*

Potters were continuing to deal with the persistent problem of bases that cracked while drying, and by the early sixteenth century, a new preventative method had been developed, the so-called filled-in base. The earliest attested example of a filled-in base comes from an early 16th-century context at Tell ed-Dēr (Pl. 62 : 10). This method was more sophisticated than putting a plug of clay in a hole in the base and, more importantly, it made it potentially faster to produce vessels. Following the new method, the potter created a hole in the center of the cone of clay on the wheel. This hole was then filled with coarsely tempered clay, so that as the vessel was thrown and its walls were drawn up, the coarsely tempered clay automatically filled in the middle of its base.

*Babylonia and its Periphery*

Besides Harrâdum, where many examples of Babylonian pottery have been recovered, we do not find large numbers or a great variety of vessels of the Late Old Babylonian Period elsewhere along the periphery. Nevertheless, the Babylonian vessels found at Tell Yelkhi in the Diyala Basin have made it possible to date Levels IV and III to the late 17th and early 16th centuries.[416]

*The Deurbanization of the North*

In 1533 (Ammiṣaduqa, year 18) both Tell ed-Dēr and Khirbet ed-Diniye (Harrâdum), the sites which have yielded our most substantial ceramic records for the 16th century, were abandoned as part of the deurbanization of northern Babylonia and its outposts along the Middle Euphrates. This deurbanization culminated in the fall of Babylon in 1499 NLC.

From 1533 until the middle of the 15th century we have no evidence of the pottery from Babylonia.

415 E.g., Pls. **60** : 2 and 4, and **62** : 7, 9 and 11-12.

416 See the chapter Key Stratigraphic Sequences, *sub* Tell Yelkhi.

## The 15th and 14th Centuries (Early Kassite Period)

*The Babylonian Tradition in Susiana*

Our best evidence for the Babylonian pottery of the early 15th century comes from Susiana, where Babylonian goblets that look Early Kassite appear at Susa in Level A XII *récent* (Group 215 A 2 ; Pl. 100 : 7). In fact, it appears that potters were among a group of people who left northern Babylonia, presumably because of unsettled conditions there at least half a century before the collapse of the First Dynasty of Babylon, and came to live and work in Susa during the middle of the 16th century.[417]

Good evidence that Babylonian pottery was being produced in Susa in the 15th and early 14th centuries includes the goblets already mentioned (Pl. 100 : 6-7) and the footed cups of Groups 210 A 2 and 210 B 2 (Pls. 96 : 8 and 97 : 15 respectively). The wavy-sided bowl of Group 20 H 1 was apparently also present at Susa.[418]

The Babylonian goblets were taken into the pottery tradition of Susiana. They continued to be produced there long after the 15th century, down to the end of the 2nd millennium. However, the direct contact with Babylonian potters and their pottery forms was of relatively short duration. The later goblets of Susiana, sometimes called Elamite goblets, followed a separate developmental path from their Babylonian counterparts. By the 13th century they had begun to take on distinct, non-Babylonian characteristics as they became increasingly slender and their necks grew to be very tall.[419]

There is an important difference between the Babylonian and Babylonian-influenced goblets from Susa and the goblets from Babylonia proper. The Susa potters used plugged bases exclusively on their goblets ; no other types of bases have been attested on these forms. Babylonian goblets, on the other hand, have different types of bases, but already by about 1400 the filled-in base had come to predominate.[420] This difference in bases has chronological implications, because it suggests that the Babylonian goblets came to Susa at a time when plugged bases were common in Babylonia, that is, early in the 15th century or perhaps even late in the 16th century.

*The Common Babylonian Tradition*

The morphologically earliest 15th century vessels from Babylonia come from Tell ed-Dēr, including wavy-sided bowls that may be dated as early as around 1450.[421] There are also a jar and a goblet,[422] found together in Burial 392, which we have also dated to the middle of the 15th century.[423] From around 1400 come the vessels of Operation E3 Phase Ic, several of which have been illustrated here : wavy-sided bowls,[424] jars of Groups 165 A 2 and 205 A 2,[425] cups of Group 210 A 2[426] and storage jars of Group 270 J 3.[427]

We do not yet know the date when northern Babylonian pottery, that is, the earliest pottery of the Early Kassite Period, first

417 GASCHE 2013, especially fig. 3.

418 GASCHE 1973, Pl. 4 : 13 (see also the discussion and *Comparanda* of Group 20 H 1 in the Description chapter).

419 Examples of these developments can be seen in GASCHE 1973, Pl. 19. This was not the first time a Babylonian goblet became a part of the Susiana pottery assemblage. It also happened two centuries earlier, when the 17th-century northern Babylonian goblet came to Susa and was incorporated into the local tradition (see above).

420 See also VAN AS and JACOBS 1988, 1-2.

421 Group 20 H 1 (Pl. 36 : 17 and 18).

422 Group 165 A 2 (Pl. 83 : 2) and Group 215 A 2 (Pl. 99 : 4) respectively.

423 See *MHEM* 4, 40-41.

424 Group 20 H 1 (Pl. 36 : 14-16).

425 Pls. **83** : 1 and **94** : 14 respectively.

426 Pl. 96 : 2.

427 Pl. 133 : 3.

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began to be made at southern cities like Nippur. The evidence we have at present indicates that ceramic production began again at Nippur toward the end of the 15th century ; an earlier date, however, is not impossible. A jar of Group 165 $A_2$ (Pl. 83 : 7)[428] and goblets of Group 215 $A_2$ (Pl. 99 : 9-11) are dated to around 1400. Textual evidence shows that Nippur and other southern cities were beginning to re-emerge at about the same time.[429]

By the middle of the 15th century the wavy-sided bowl, Group 20 $H_1$, had replaced the straight-sided bowl of the Old Babylonian Period (Group 10 $A_1$) as the principal small bowl. The 16th-century version of the what would become the wavy-sided bowl may be represented by the bowls of Group 20 $G_1$. However, from the 15th century on, the shape of the wavy-sided bowl endures virtually unchanged until sometime after 1100.[430]

The development of the Babylonian goblets continues in the early years of the Kassite Period.[431] The goblets now have shoulders, created by their relatively high maximum body diameters, higher in almost all cases than was ever true in the 16th century.[432] Absent entirely are examples with unfinished flat or stump bases, which had already begun disappearing by the 16th century ; only reshaped feet remain. The feet on early examples sometimes have plugged bases (Pl. 99 : 2). The morphologically earliest 15th-century goblet we have from Babylonia, however, already has a filled-in base (Plate 99 : 4). As we have said above, the filled-in base would become characteristic for goblets of the rest of the Kassite Period (see Pl. 99 : 1 and 4, and Pl. 101 : 5-6 and 9), though plugged bases do not disappear entirely.

The goblets of the 15th/early 14th century are stout and squat, when compared with the thinner examples of the later 14th (Pl. 99 : 5-7 and Pl. 100 : 1) and 13th (Pls. 101-103) centuries. Goblets from later in the 14th century are intermediate in shape between the earlier forms just described and the tall, slender forms of the 13th century. They generally have open interiors and relatively thin bases, features they share with the earlier goblets. This distinguishes them from the slender 13th-century goblets, which are characterized by thick bases, also known as solid feet.[433]

The earliest attested footed cups in Babylonia, those of the 14th century, appear to be descendents of the 16th-century cups of Group 170 $D_2$ (Pl. 86 : 4-10). Both groups of cups have globular bodies and most have tall, flaring necks. However, the Early Kassite examples have reshaped feet instead of the delicate ring bases of their 16th-century predecessors, which are more finely made.

On the jars of the late 15th/early 14th centuries (Group 165 $A_2$) the line of maximum body diameter is slightly higher than it was in the 16th century,[434] The jars are no longer truly globular but are beginning to have an inverted piriform profile. To see this difference, compare the bodies of Plate 83 : 5 (16th century) and Plate 83 : 1 (ca. 1400). Another difference is that instead of the typical Old Babylonian ring base, the 15th/14th-century vessels have a reshaped foot. Both Plate 83 : 1 and 2 have filled-in bases, typical for the latter half of the 2nd millennium.[435]

Finally, we note that the goblets, cups and jars of the Early Kassite Period are well made and well finished. In general, they more carefully manufactured than those of the 13th century.[436]

We are surprised that cooking pots (particularly Group 55 $A_3$) are not attested after the 16th century, since the shape and material of this vessel are ideal for the purpose of cooking over a fire. This may be a case where sherds have not been recorded or published. Cooking pots tended to be used until they lost their bottoms and fell to pieces, so whole examples are likely to be relatively rare.

The ring base was still frequently found on Babylonian pottery in the 16th century. However, by the 15th and 14th centuries it had disappeared almost entirely. Shapes of the latter half of the 2nd millennium overwhelmingly have either a flat, string-cut base or a reshaped foot ; large storage jars still have round bottoms. Already in the Early Kassite Period the only vessels that regularly have ring bases are large vats and burial jars.[437]

In the Early Kassite Period, round-bottomed storage jars continue to be made. Only a few whole profiles have been recorded, but there are many rim sherds. The rims are either outwardly beveled, that is, triangular,[438] or bear two or more ridges.[439] Ancestral forms of Groups 270 $H_3$ and 270 $I_3$, dating to the 16th and 15th century, are present at Susa (Pl. 131 : 1, 2 and 4). It is probable that these shapes traveled to Susa together with the other Early Kassite forms already mentioned.

Perhaps the most noticeable difference between the 16th century and the 15th/14th centuries has to do with the great reduction in the number of pottery forms. Sixty groups in the present study are attested in northern Babylonia in the 16th century, while only 16 groups are attested in all of Babylonia during the Early Kassite Period.[440] The ancient potters, of course, did not divide their pottery the same way we have done here. Even so, the seventy-five percent reduction in the number of different forms is striking. The Kassite assemblage seems to represent the minimum number of different pottery forms needed for the functioning of a Babylonian household. With the exception of storage jars, where we have identified four groups,[441] there is otherwise virtually one group for each kind of vessel.

In our earlier study we attributed this reduction in the number of forms to the turmoil at the close of the Old Babylonian Period.[442] While this may still be part of the truth, it may also be that the reduction in different shapes had more to do with increasing speed and efficiency in ceramic production. Several characteristics of the production of pottery in the Kassite Period indicate that speed had become very important to the potters.

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428 A second Early Kassite jar from Nippur has been published in *OIP* 129, Pl. 168 : 4.

429 See *MHEM* 4, 40 for a discussion of the earliest textual evidence from Nippur, which consists of texts dated to the reigns of Kadašman-Ḫarbe I, Kurigalzu I and possibly Kadašman-Enlil I, three kings who ruled in succession possibly from the end of 15th century and certainly in the early years of the 14th. The Kassite ruler Karaindaš built a temple at the southern city of Uruk toward the end of the 15th century, though no late 15th-century pottery has yet been identified at the site.

430 After the beginning of the 11th century, there is no dated ceramic evidence that enables us to say how much longer the wavy-sided bowl was in use.

431 Group 215 $A_2$, especially Pls. 99-100.

432 We can see that the 16th-century goblets from Harrâdum, which have small shoulders (Pl. 62 : 11-12), anticipate the broader shoulders of the Early Kassite Period.

433 As the goblets became slimmer, the potter could no longer reach his hand inside to estimate the height of the inside of the base. Therefore, he tended to cut low when he removed the goblet from the wheel, which resulted in a thick base or solid foot. The thick, heavy base may have been regarded as a necessary feature of these narrow goblets, because it lowered the center of gravity of what were otherwise tall, top-heavy forms (see also VAN AS and JACOBS 1987 and pp. 80-81 above).

434 Pls. **83** : 1-2 and 7-9 ; **94** : 13-14 ; and **95** : 11.

435 A few jars from later in the Kassite Period (Group 205 $A_2$) still have plugged bases (Pl. 94 : 7 and 13).

436 See also the similar observations of MINSAER 1991a, 43 and TAHA BAQIR 1945, 14.

437 Groups 260 $B_2$ and 260 $C_2$ (Pl. 119 : 5 and 7).

438 Groups 270 $H_3$ and 270 $I_3$ (Pl. 132 : 1-2 and 6).

439 Group 270 $J_3$ (Pl. 133 :1-3).

440 This phenomenon has been noticed before, but not to such a degree. See Table II in *OIP* 78.

441 Groups 270 $H_3$, 270 $I_3$, 270 $J_3$ and 270 $K_3$.

442 *MHEM* 4, 43.

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There is almost no decoration on pottery between the 15th and 13th centuries. There are no "better-quality" ceramics, no equivalents to the painted vessels – bowls, bottles and jars – of the 17th century or the fine-ware cups (Group 170 D 2) of the 17th and 16th centuries.[443] There are very few ring bases, except on very large handmade forms.[444] The preferred bases are the unfinished string-cut base and the reshaped foot, both of which can be made faster than a ring base. In terms of manufacturing techniques, the filled-in base was favored by Kassite potters over the earlier plugged base for preventative strengthening. Was this because using the filled-in base technique, which incorporated the coarsely-tempered clay into the base during the throwing process, permitted them to make pots faster ?[445] Finally, there is the carelessness that is apparent in the manufacture of most vessels in the 13th century. By that time producing an attractive, well-finished vessel seems not to have been an essential part of the potters' task. Against this background, it could be that the reduction in the number of different shapes was part of a shift to a faster, more efficient production process.

*Babylonia and its Periphery*

Many examples of Babylonian pottery from early in the Kassite Period were found by the Danish excavators in Building I of Excavation 519 on the island of Bahrain in the Gulf : wavy-sided bowls,[446] jars and goblets.[447] Early footed cups (Group 210 A 2) are also attested on the island.[448] Textual evidence indicates that Kassite rulers had already begun pushing out into the Gulf before 1400 and had established an ongoing Babylonian presence on Bahrain.[449] This is confirmed by the significant quantities of Babylonian pottery that have been found on the island dated to the 15th and/or 14th centuries.

The Babylonian pottery found at Tell Yelkhi in the Hamrin has helped date Level I of the site to the 14th century.[450] Several examples are illustrated here, including a wavy-sided bowl of Group 20 H 1 (Pl. 37 : 23), a fragmentary jar of Group 165 A 2 (Pl. 83 : 8), footed cups of Group 210 A 2 (Pl. 96 : 6-7) and a goblet of Group 215 A 2 (Pl. 100 : 1). The comparatively limited amount of Babylonian pottery at Tell Yelkhi in the 14th century suggests that there was a modest level of contact between the Hamrin and Babylonia at this time. Farther east, Babylonian pottery seems to have already made it to western Iran by around 1400.[451]

## The 13th through 11th Centuries (Late Kassite and Isin II Periods)

*The Common Babylonian Tradition*

By the 13th century the goblets had become tall and slender and generally had solid feet (Group 215 A 2 ; Pls. 101-103). They continued to be manufactured until some time early in the 12th century. The classic Kassite goblet of the 13th century, the form *par excellence* for dating archaeological remains of the Late Kassite Period, is, in fact, a vessel that can now be shown to have its origins in the 18th century. We are able to trace the evolution of its shape and the technology of its manufacture for approximately six centuries, from the 18th century through the 12th. When production of the goblet finally ceased, there was no obvious successor in the 12th-century pottery assemblage.

The footed cups of Groups 210 B 2 and 210 C 2 encountered in 13th-century contexts mostly have an inverted piriform shape with a high shoulder. They are often hastily and carelessly manufactured. Like the Kassite goblets, they ceased being made some time around 1200.

The only significant difference between the pottery of northern and southern Babylonia in the Kassite Period involves the shapes of the small jars of Groups 205 A 1 and 205 A 2 in the 13th century, and even this difference is not absolute. Northern Babylonian examples, including jars from the northern periphery, tend to have a wider profile with a pronounced low shoulder when compared with examples from the South and the southern periphery. In southern Babylonia the profiles frequently have a higher shoulder. Compare Plates **94** : 1-2, 5 and 7-11, and **95** : 12-14 (North) with Plate **95** : 5-6, 9 and 15 (South). Except for this distinction, the Babylonian ceramic tradition between the 15th and 11th centuries is uniform.

During the 12th century and down to around 1100 the small jars of Group 205 A 2 continue to be produced (Pl. 95 : 1-4). They are joined by another group of small jars, the slender jars of Group 195 A 2, which first appear around 1200 and continue in production at least to around the beginning of the 11th century. The sinuous-sided cups of Groups 195 B 1 through 195 C 4 also first appear in the 12th century. These may have taken over the function of the footed cups of Groups 210 B 2 and 210 C 2, based on their size and shape. The footed cups and the sinuous-sided cups have thus far not been found together. Finally, there are the small bottles of Groups 190 A 3 and 190 B 3, which also appear at this time. These are described below under *Decoration*.

The round-bottomed storage jars of the previous century continued to be produced in the 13th century. One new development was the emergence of jars with thinner bodies. With their ridged rims these thinner jars constitute Group 270 K 3. The tallest jars of Group 270 K 3 (Pl. 133 : 9-10) are attested only in the 12th century.

Much of the 11th century is still unknown to us, leaving a gap at the end of the 2nd millennium that will need to be filled by future excavations. The latest known 2nd-millennium pottery from Babylonia, from the burials at the surface of *Nordabschnitt* II at Isin, cannot be confidently dated later than the beginning of the 11th century, based on the available archaeological evidence.[452] Thereafter, the Babylonian ceramic record is silent until around the middle of the 8th century.

*Decoration*

On large vessels of the Kassite and Isin II Periods, decorative touches such as ridges and incisions are found much less frequently than they are earlier in the millennium. Decoration is

443 Essentially only very large forms, handmade vats and burial jars, are decorated, and even they display much less applied or incised decoration than their counterparts in the early part of the millennium. See Groups 260 B 2 and 260 C 2 (Pl. 119) and Group 265 A 2 (Pl. 124).

444 See Groups 260 B 2 and 260 C 2 (Pl. 119).

445 See p. 93.

446 Group 20 H 1 (Pls. 37 : 25).

447 Groups 165 A 2 (Pl. 83 : 9) and 215 A 2 (Pl. 100 : 2-4) respectively.

448 On p. 121 of LOMBARD (ed.) 1999 a photograph shows two footed cups of the Early Kassite Period from a cemetery on Bahrain.

449 VAN KOPPEN 2010 : 458-459.

450 A substantial building, called a *palazzo* by the excavators, occupied the summit of the tell at this time (BERGAMINI *et al*. 1985, 56).

451 PONS and GASCHE 2006, 380.

452 K. Kaniuth generously shared his conclusions about *Nordabschnitt* II, for which we are very grateful.

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virtually non-existent on most other vessels until the beginning of the 12th century.

At that time the small, handmade globular bottles of Group 190 $A_3$ make their appearance. Many of these were painted entirely in red, on top of which white-painted designs were applied.[453] The red paint may have served to seal the walls of the vessel so that it could effectively hold perfumes or other oils.

Contemporary with these painted bottles is a unique green-glazed oval bottle from Isin, which almost certainly would have held a valuable liquid (Pl. 89 : 12).[454] By the time of this vessel, in the 12th century, glazed pottery had already been in use in northern Mesopotamia for at least two centuries[455] but glazed pottery did not become a regular part of the Babylonian pottery tradition until much later, in the 1st millennium.

### *Babylonia and its Periphery*

Based on the pottery at peripheral sites, Babylonians moved into the surrounding areas during the Late Kassite Period. In the 13th and early 12th centuries, the pottery from sites in the Hamrin (Diyala Basin) is largely Babylonian, which suggests that Babylonians had settled in this area. Two sites, Tell Zubeidi and Tell Kesaran were the locations of potters' workshops with kilns that were used to produce typical Babylonian shapes. These sites, together with Tell Imlihiye, are particularly informative for the period. They help to fill the gap in our knowledge of Babylonian pottery that begins in the latter half of the 13th century with the abandonment of Tell ed-Dēr and a great reduction in the size of Nippur, and continues until the time of the Isin II settlement at Isin (*Nordabschnitt* II).

Babylonian pottery continues to be attested in western Iran, at Tepe Guran. There a number of fragmentary Babylonian vessels were found alongside local ceramics. These Babylonian shapes, which could be mistaken for vessels from the Babylonian heartland, were made of local clay. This suggests that Babylonians had settled in this area and were making their own pottery.[456]

In the Middle Euphrates, the pattern is of a string of modest sites on either side of the modern Syrian-Iraqi border where the inhabitants were using Babylonian pottery.[457] These people almost certainly were Babylonians. Based on the presence of pottery of the Late Kassite Period,[458] Babylonians were also still active in the Gulf at least as late as the 13th century.

The directions in which the Babylonians moved indicates that they were pushing outward along trade routes. The limited number of Kassite vessels that appear north of Babylonia in Assyria suggests that the Babylonians were not expanding in that direction, because their access was undoubtedly blocked by the Assyrians.

## Conclusion

At the most basic level this guide provides a tool for archaeologists to use as they attempt to date the pottery they encounter in their work. We have been able to show which shapes endured virtually unchanged for long periods and which changed rapidly enough that they can readily be used as diagnostic indicators for relatively short intervals of time. We have organized our presentation in terms of centuries, but we believe that if investigators have enough different diagnostic shapes available, they may be able to narrow down our time frames substantially.

Our study has shown that there is indeed a continuous Babylonian ceramic tradition for the 2nd millennium. We now have a good understanding of the developmental links among the shapes and how these shapes reflect and reveal the manufacturing technology that was used to produce them. We have been able to closely define the chronological gaps in our knowledge, so that we have the possibility of narrowing them down even further. Crucially, we have traced the genealogy of the principal ceramic groups of the Kassite Period back into the Late Old Babylonian Period. We have been able to show how pottery shapes and manufacturing techniques are connected to one another across the gap in evidence in Babylonia that spans the end of the 16th century and a large part of the 15th.

Moreover, in the geographic distribution of Babylonian pottery, both in the heartland and along the periphery, we can begin to see reflections of the expansion and contraction of Babylonian political and economic power.

There is still much work to be done, but as the present study shows, we already have a lot of material at our disposal to help us make sense of the chronological, geographic and developmental relationships among the vessels that comprise the Babylonian ceramic tradition.

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453 See, for example, Plate 89 : 6 and *Isin* 1, Pl. 37 : IB 600 a-c (color plate).

454 Group 190 $B_3$.

455 For example, at Nuzi, see STARR 1937, Pls. **68** : K and **75** : X-Y.

456 THRANE 2001, 69-74 and Pls. 26-33 ; and PONS and GASCHE 2006.

457 PONS and GASCHE 1996.

458 For example, Pls. **12** : 6-7, **37** : 24, **95** : 15, **98** : 16 and **103** : 7-8.

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# PLATES

*Legend*

Scales : 1/2 (Plates 1-115), 1/5 (Plates 116-136).
Except where otherwise indicated, the color is that of the center of the vessel wall.

*General*

| | |
|---|---|
| * | Section polished mechanically before being drawn |
| ø rim | Diameter in mm |

| | | | |
|---|---|---|---|
| D. B. | Diyala Basin | OI | Oriental Institute |
| Ens. | Ensemble (= stratigraphic unit ; see *TD* 2, 58-61) | Prob. | Probably |
| | | *Rempl.* | *Remplissages anciens*, (pottery found in) ancient fills (Larsa. Exc. Huot) |
| *F.S.* | *Fouille stratigraphique* (Larsa. Exc. Parrot, 1967) | | |
| IM | Iraq Museum | S | Surface of the vessel (Color) |
| M. E. | Middle Euphrates | *SA* | Süd-Abschnitt (Isin) |
| *NA* | *Nord-Abschnitt* (Isin) | S. A. P. | Southern Alluvial Plain |
| N. A. P. | Northern Alluvial Plain | *SOA* | *Südost-Abschnitt* (Isin) |
| *N.E.* | *Zone Nord-Est* (Larsa. Exc. Parrot, 1933) | *Sols* | Pottery associated with floors |
| *NOA* | *Nordost-Abschnitt* (Isin) | *WA* | *West-Abschnitt* (Isin) |

*Sites*

| | | | |
|---|---|---|---|
| AbS | Abu Shijar, near ‘Aqar Qūf | J | Jokha (Umma) |
| al-Sh | al-Shuweimiya / Middle Euphrates | K | Kish |
| As | Asmar Tell / Diyala | Kes | Kesaran, Tell / Diyala |
| Aja | Ajamat Tell / Diyala | Kha | Khafajah / Diyala |
| Agr | Agrab, Tell / Diyala | L | Sinkara (Larsa) |
| B | Babylon | M | Mari / Middle Euphrates |
| Bah | Bahrain | N | Nippur |
| D | Dēr, Tell ed- (Sippar-Amnānum, …) | S | Susa / Susiana |
| Dey | Deylam, Tell ed- (Dilbat) | Sip | Abu Habbah (Sippar) |
| Din | Khirbet ed-Diniye (Harrâdum) | T | Telloh (Girsu) |
| Fai | Failaka | TZ | Tchogha Zanbil / Susiana |
| H | al-Hiba (Lagaš) | U | Umm al-Hafriyat / S. A. P. |
| Hal | Halawa / Diyala | Ur | al-Muqaiyar (Ur) |
| I | Išān Baḥrīyāt (Isin) | W | Warka (Uruk) |
| Iml | Imlihiye, Tell / Diyala | Yel | Yelkhi / Diyala |
| Ish | Ishchali / Diyala | Zub | Zubeidi, Tell / Diyala |

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5 A 1

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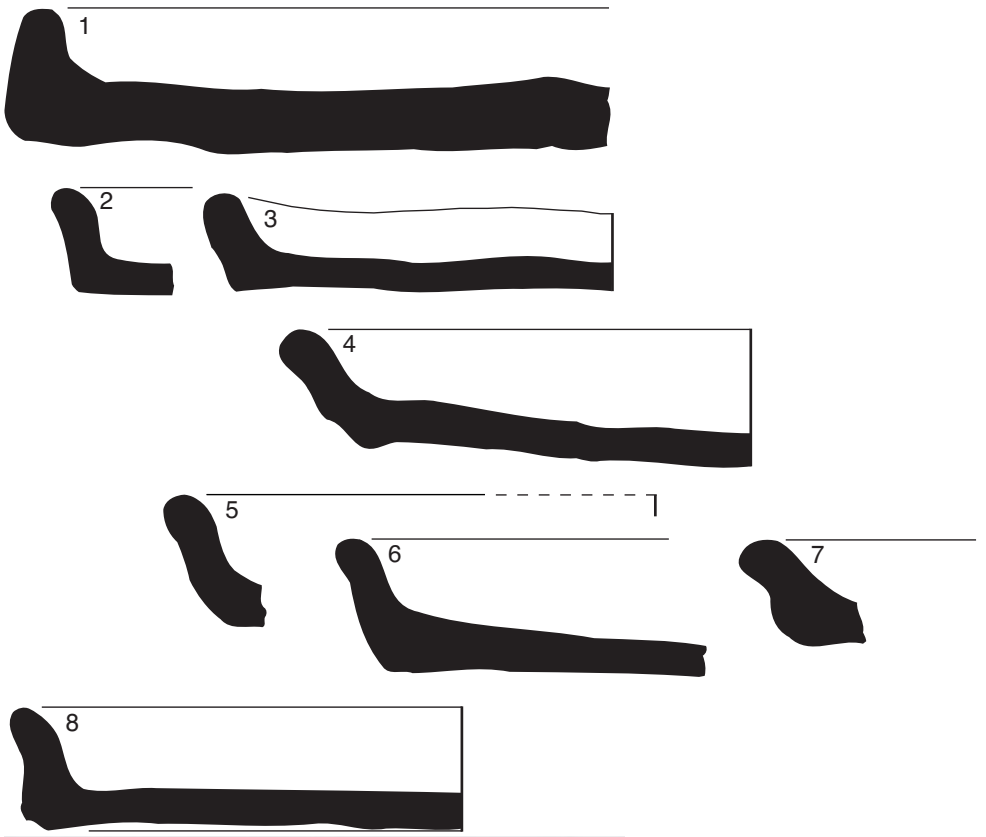


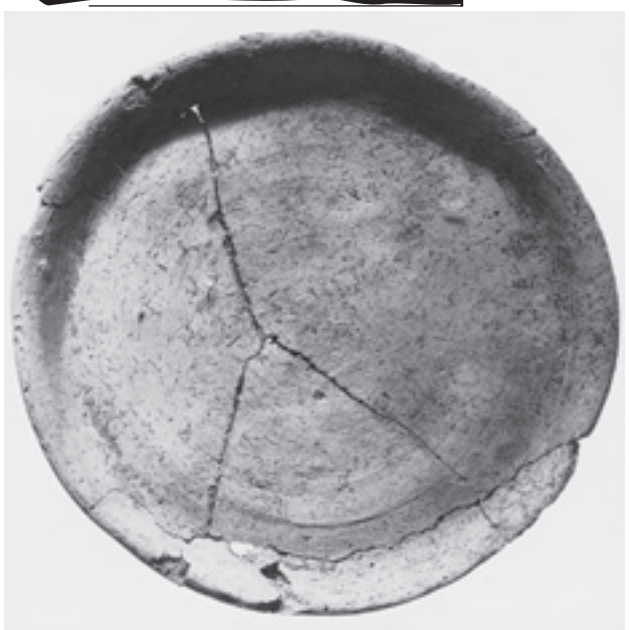

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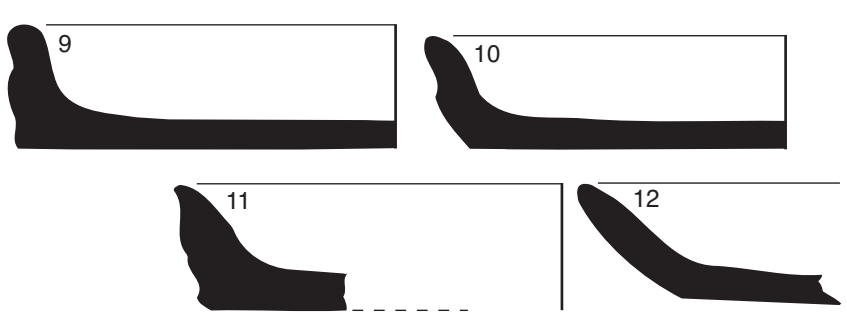


NORTHERN ALLUVIAL PLAIN SOUTHERN ALLUVIAL PLAIN

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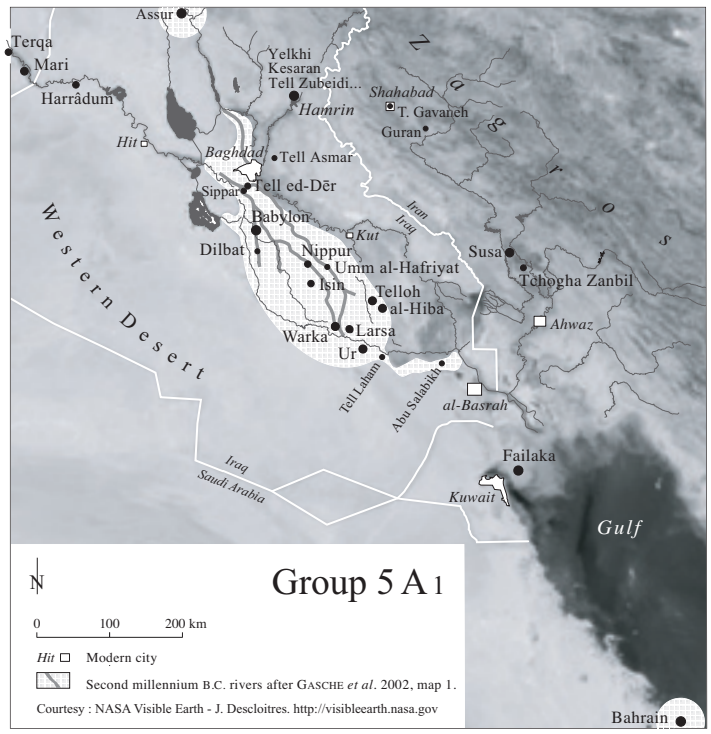
# PLATE 1

## 5 A 1

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 104053 | E | IIIb | 5YR 5/6 | ø rim : ± 300. Burial 245 dug from IIIb. *MHEM* 1, Pls. 24 and 25 : 1. |
| 2* | D | 106749 | E | IIIb | 7.5YR 7/4 | ø rim : ± 250. *MHEM* 1, Pl. 25 : 7. |
| 3* | D | 104029 | E | IIIb | 5YR 6/6 | ø rim : 215. Burial D.259A dug from IIIb. *MHEM* 1, Pls. 24 and 25 : 2. |
| 4* | D | 103167 | E *sud* | 0 | 7.5YR 6/4 | ø rim : 250. Pit 2 dug from Ensemble 0. |
| 5* | D | 106830 | E | IIIc | 10YR 7/3 | ø rim : ± 260. |
| 6* | D | 106745 | E | IIId | 5Y 7/2 | ø rim : ± 260. |
| 7* | D | 106759 | E | IIId | 10YR 7/3 | ø rim : ± 230. *MHEM* 1, Pl. 25 : 6. |
| 8* | D | 104444 | E | IIId | 10YR 8/2 | ø rim : 240. Burial D.276 dug from IIId. *MHEM* 1, Pls. 15 and 25 : 9. SALLABERGER 1996, Pl. 1 : 1. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 9 | I | - | - | - | - | ø rim : 208. *Isin* 3, 75, Pl. 28 : 9. |
| 10 | I | - | - | - | - | ø rim : 192. |
| 11 | L | 38.1 | J VIII | 2 | - | ø rim : 205. Exc. Huot, 1970. MINSAER 1990, Pl. 5 : b. CALVET *et al*. 2003, fig. 5 : b. |
| 12 | N | B 1011 | WB | IV 5 | greenish buff | ø rim : -. |




10 cm

(Photos at various scales)

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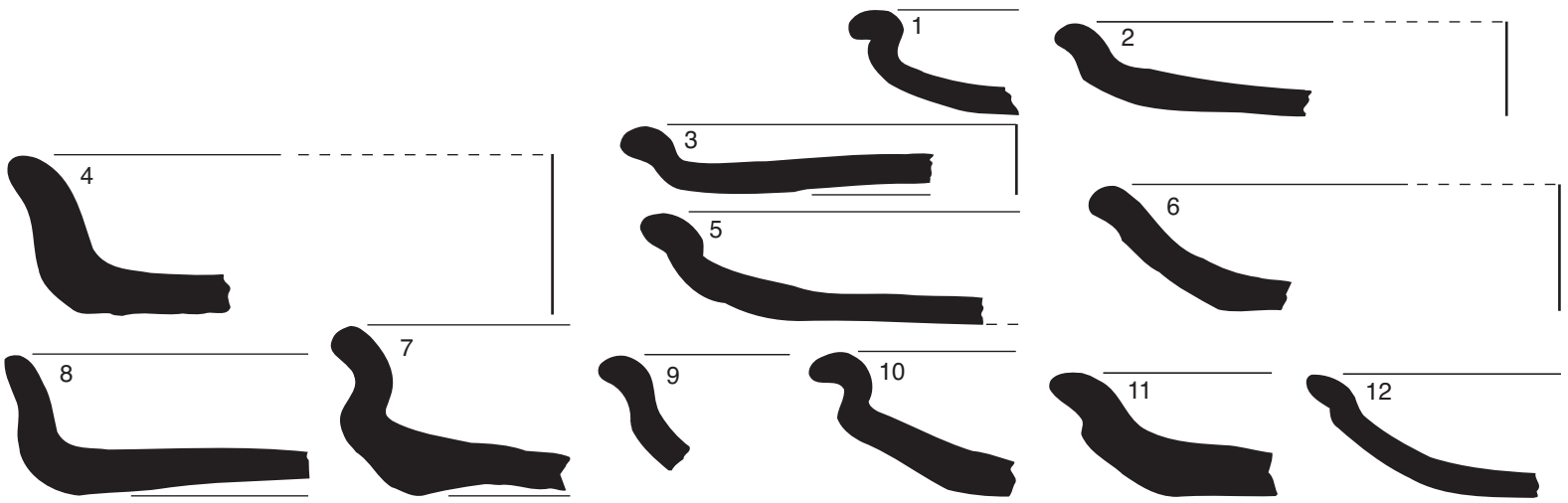
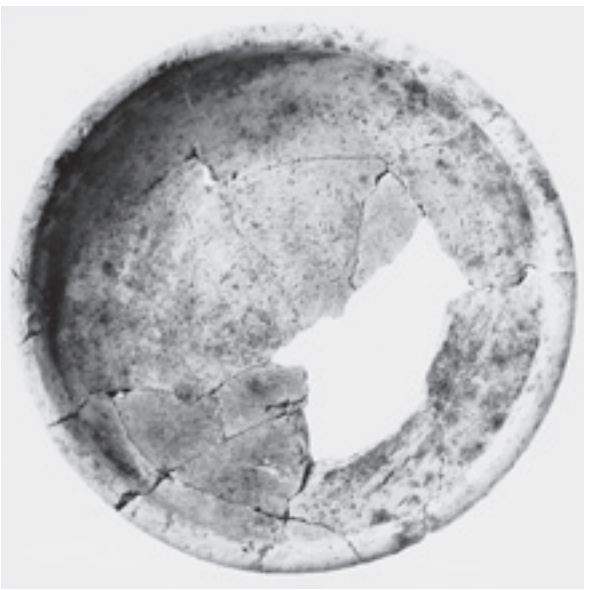
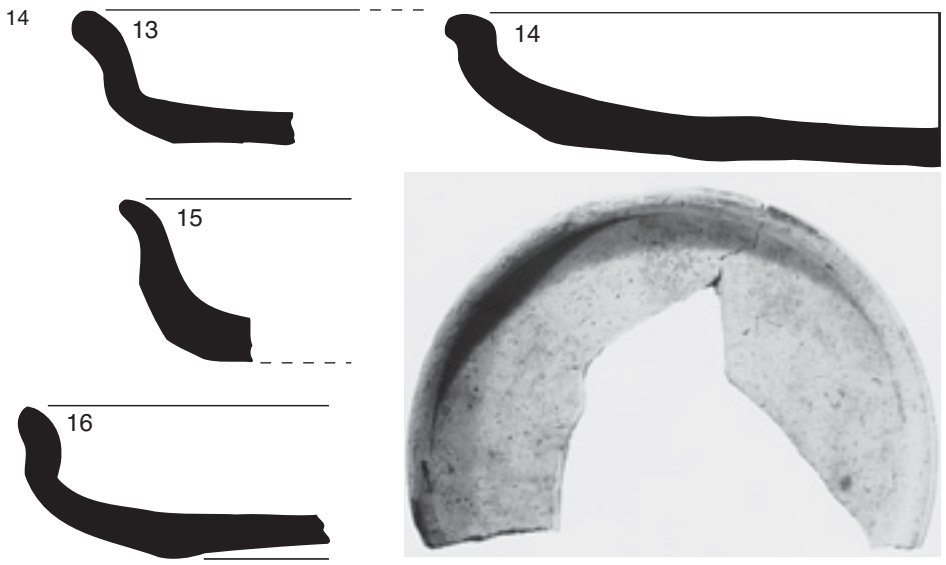
5 B 1





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NORTHERN ALLUVIAL PLAIN

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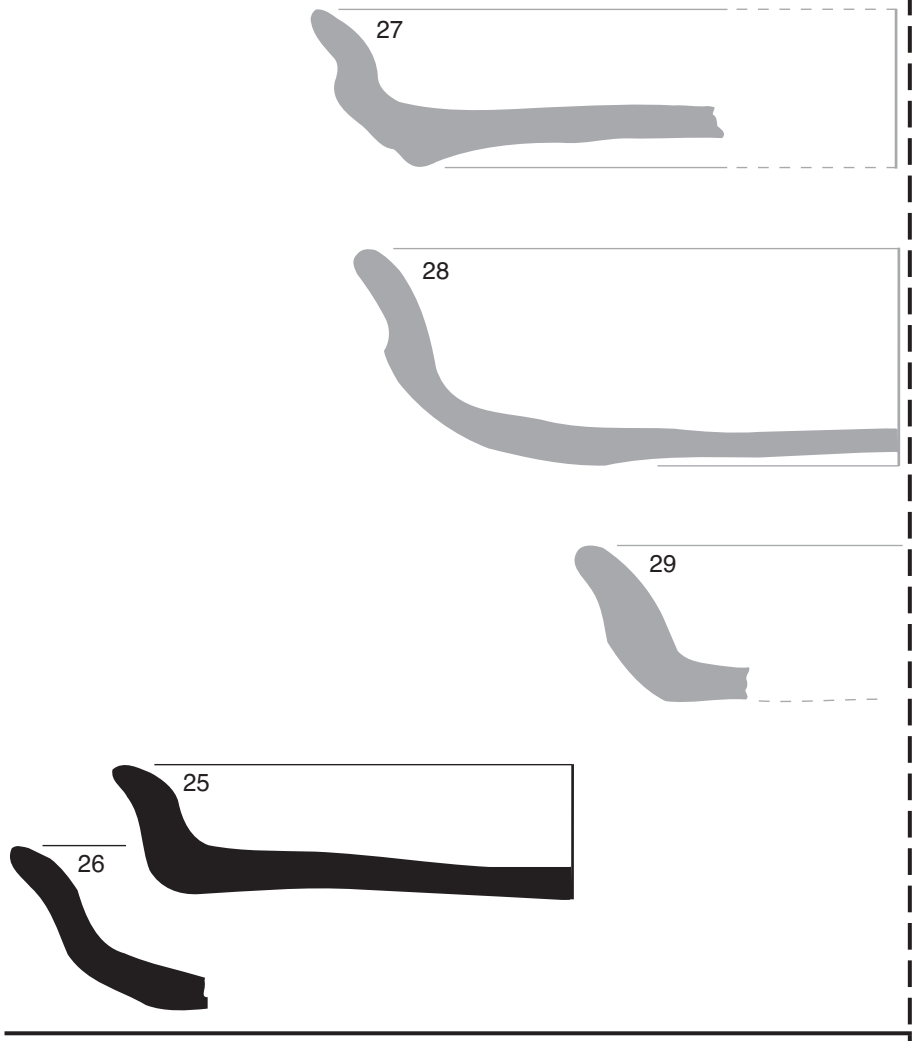
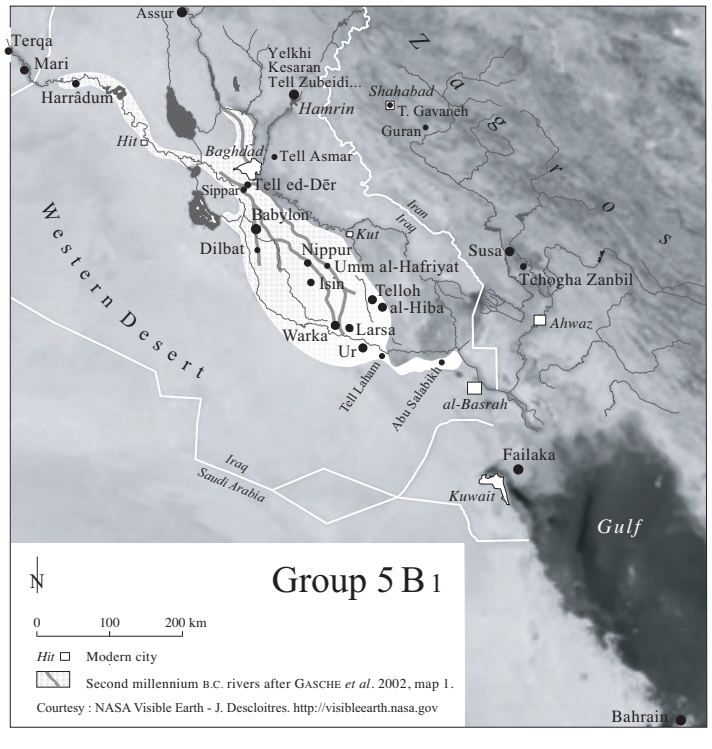
# PLATE 2

## 5 B 1

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 106859 | E | IIIa | 5YR 6/6<br>S : 10YR 8/3 | ø rim : 230. Axis not shown. |
| 2* | D | 106977 | E | IIIa | 7.5YR 6.5/4 | ø rim : ± 238. |
| 3* | D | 103895 | E | IIIb | 10YR 6/2 | ø rim : 208. *MHEM* 1, Pl. 25 : 37. |
| 4* | D | 106755 | E | IIIb | 5YR 7/3 | ø rim : ± 290. *MHEM* 1, Pl. 25 : 11. |
| 5* | D | 106861 | E | IIIb | 7.5YR 6/4<br>S : 2.5YR 8/2 | ø rim : 310. *MHEM* 1, Pl. 25 : 39. Axis not shown. |
| 6* | D | 106842 | E | IIIb | 10YR 6/3 | ø rim : ± 250. *MHEM* 1, Pl. 25 : 33. |
| 7* | D | 103330 | E | IIId | 10YR 7/3 | ø rim : -. *MHEM* 1, Pl. 25 : 20. |
| 8* | D | 104031 | E | IIId | 5YR 5/6 | ø rim : ± 260. Burial D.260 dug from IIId. *MHEM* 1, Pls. 15 and 25 : 12. |
| 9 | Dey | A 89.3 | B | IV | 2.5Y 7/2<br>S : 2.5Y 8/4 | ø rim : -. ARMSTRONG 2001, fig. 8 : b. |
| 10* | D | 103872 | E | IIIc | 10YR 7/3 | ø rim : -. |
| 11* | D | 106832 | E | IIId | 2.5Y 8/2 | ø rim : ± 280. *MHEM* 1, Pl. 25 : 29. |
| 12 | Dey | A 82.1 | B | II | 7.5YR 6/6<br>S : 10YR 7/4 | ø rim : -. ARMSTRONG 2001, fig. 8 : a. |
| 13* | D | 106840 | E | IIId | 2.5Y 8/2 | ø rim : ± 290. *MHEM* 1, Pl. 25 : 18. |
| 14* | D | 103681 | E | IIId | 10YR 7/3 | ø rim : 260. Burial D.226 dug from IIId. *MHEM* 1, Pls. 22 and 25 : 34. |
| 15* | D | 106838 | E | IIId | 7.5YR 7/4 | ø rim : ± 280. *MHEM* 1, Pl. 25 : 14. |
| 16* | D | 104420 | E | IIId | 5YR 6/4 | ø rim : ± 270. *MHEM* 1, Pl. 25 : 24. |
| 17* | D | 104027 | E | IIId | 7.5YR 7/4 | ø rim : 274. Burial D.259B dug from IIId. *MHEM* 1, Pls. 15 and 25 : 41. |
| 18* | D | 106866 | E | IIIe | 10YR 7/4<br>S : 2.5Y 8/4 | ø rim : ± 280. |
| 19* | D | 106829 | E | V | 5YR 7/4 | ø rim : -. |
| 20* | D | 107950 | F | 0 | 5YR 7/3 | ø rim : 380. Burial D.395 dug from Ensemble 0. |
| 21* | D | 101137 | A | 0 | 10YR 8/3 | ø rim : ± 280. Pit 1 (cf. *TD* 2, Plan 6) now attributed to Ensemble 0. |
| 22* | D | 101427 | A | Ic | 5YR 5/6 | ø rim : ± 260. |
| 23* | D | 101425 | A | Ic | 7.5YR 7/4 | ø rim : -. |
| 24* | D | 100956 | A | Id | 10YR 6/3 | ø rim : ± 345. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 25 | W | 19821 | Sînkāšid | 4 | *gelb* | ø rim : 243. VAN ESS 1988a, fig. 1 : 7. |
| 26 | L | 27.73 | *Mais.* 27 | *Rempl.* | *chamois* | ø rim : -. Exc. Huot. CALVET 2003, fig. 47. |
| MIDDLE EUPHRATES | | | | | | |
| 27 | Din | V 450 | *Bât.* 20 | $3B_1$ | *beige rosé* | ø rim : ± 310. *Haradum* 1, fig. 117 : 11. |
| 28* | Din | V 220 | *Bât.* 4 | $3B_2$ | 10YR 8/2 | ø rim : 288. *Haradum* 1, fig. 117 : 9. Redrawn. |
| 29 | Din | V 506 | *Bât.* 10 | 3C | *beige* | ø rim : ± 328. *Haradum* 1, fig. 117 : 8. |




10 cm

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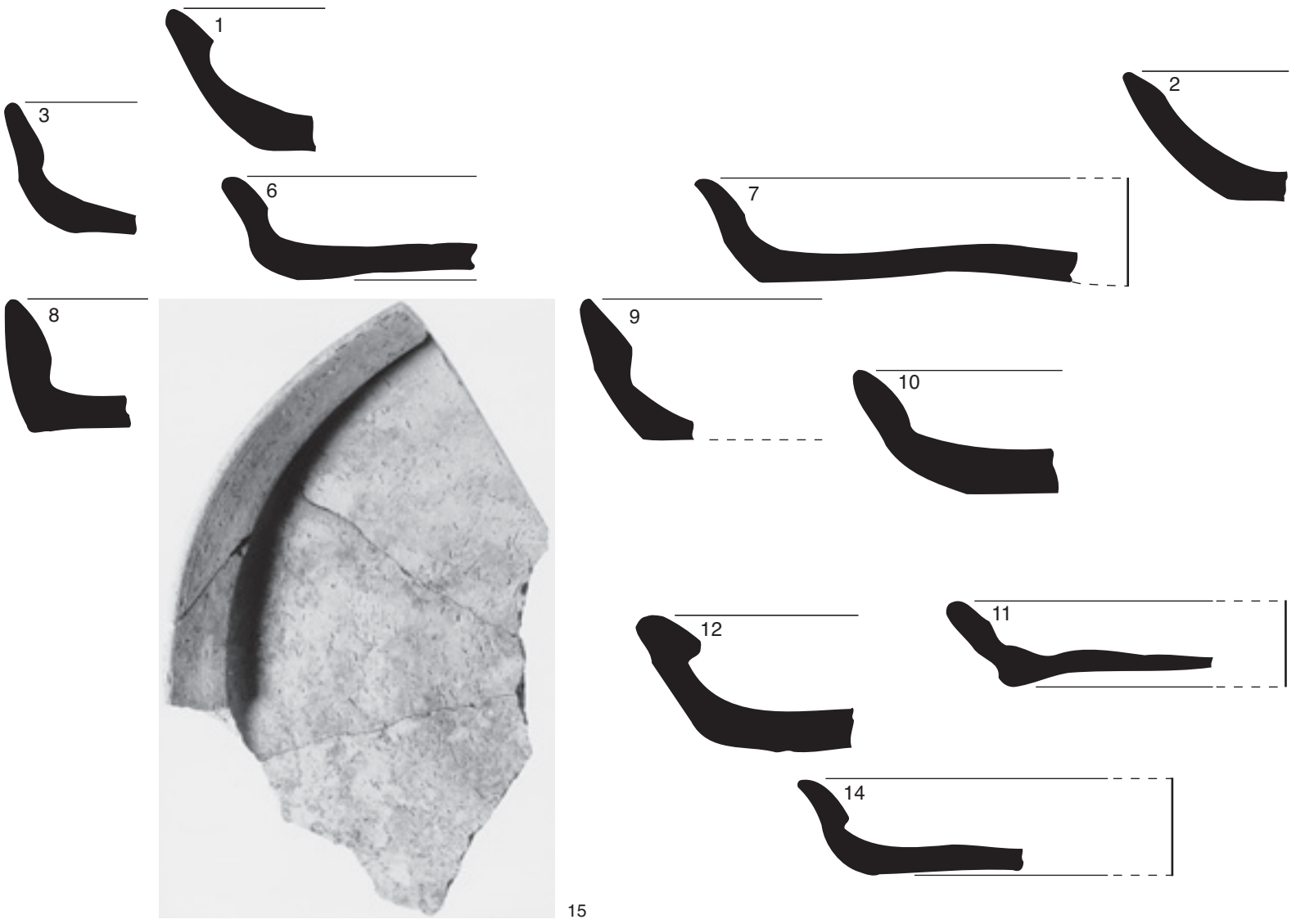
5 C 1

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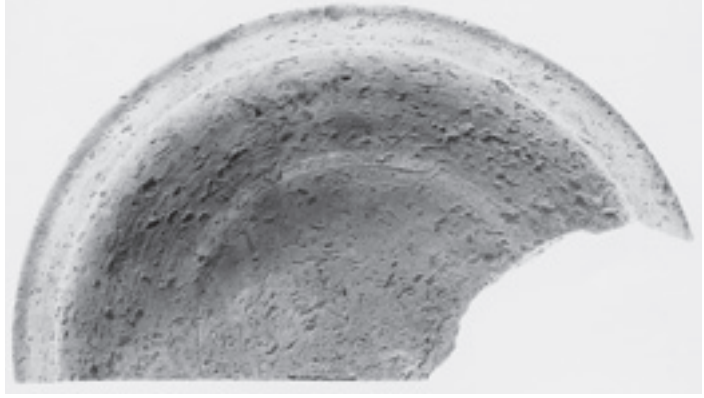
# PLATE 3

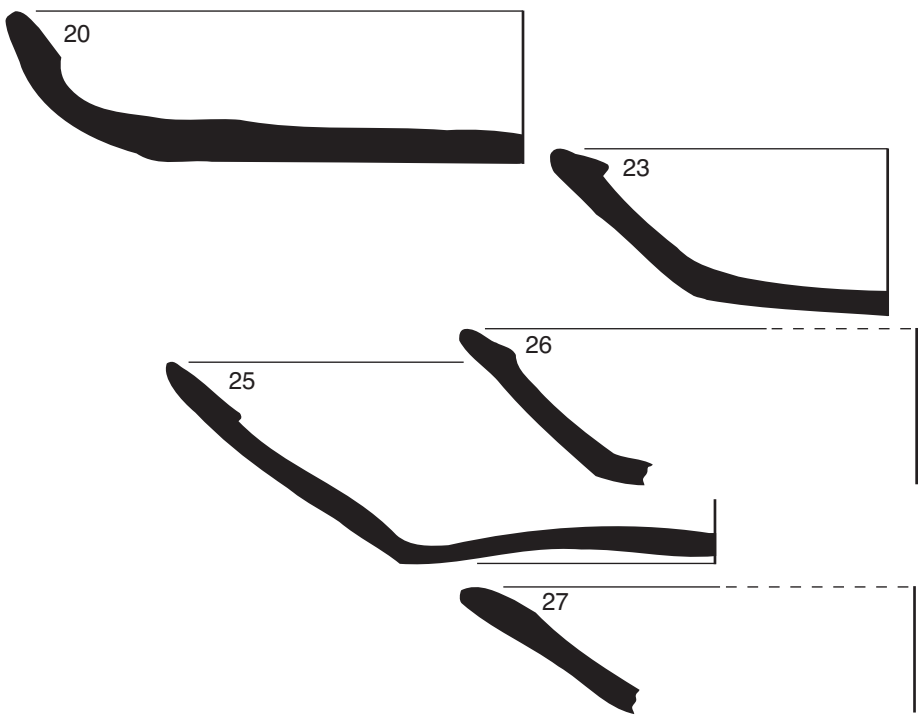
## 5 C 1

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 109472 | E | IIIb | 2.5Y 8/2 | ø rim : -. |
| 2* | D | 106789 | E | IIIc | 5YR 7/4 | ø rim : -. |
| 3* | D | 106845 | E | IIIb-d | 10YR 7/4 | ø rim : -. |
| 4* | D | 106809 | E | IIIb-d | 7.5YR 8/4 S : 10YR 8/3 | ø rim : ± 280. |
| 5* | D | 109463 | E | IIIb-d | 5YR 6/5 | ø rim : ± 180. |
| 6* | D | 106756 | E | IIId | 5YR 7/3 S : 10YR 7/3 | ø rim : ± 290. *MHEM* 1, Pl. 25 : 27. |
| 7* | D | 106824 | E | IIId | 5YR 7/6 | ø rim : ± 280. *MHEM* 1, Pl. 25 : 26. SALLABERGER 1996, Pl. 1 : 2. |
| 8* | D | 106740 | E | IIIe | 5YR 7/4 S : 10YR 8/8 | ø rim : ± 280. |
| 9* | D | 106855 | E | IIIe | 7.5YR 6/4 | ø rim : ± 280. |
| 10* | D | 106868 | E | IIIe | 5YR 6/4 S : 10YR 8/3 | ø rim : ± 280. |
| 11* | D | 107906 | F | Ib | 7.5YR 6/4 | ø rim : ± 220. *NAPR* 3, Pl. 6 : 1. |
| 12* | D | 103251 | E | V | 7.5YR 6/4 | ø rim : -. |
| 13* | D | 109460 | E | V | 5YR 6/5 | ø rim : -. |
| 14* | D | 100308 | A | 0 | 10YR 7/3 | ø rim : ± 240. Pit 1 (cf. *TD* 2, Plan 6) now attributed to Ensemble 0. |
| 15* | D | 101340 | A | Ia | 5Y 8/4 | ø rim : 290. Burial D.35 dug from Ia. |
| 16* | D | 100169 | A | Ia | 10YR 7/3 | ø rim : ± 340. *TD* 1, Pl. 13 : 9. |
| 17* | D | 100501 | B | Ia | 7.5YR 6/4 | ø rim : ± 290. |
| 18* | D | 101071 | A | Ic | 7.5YR 6/4 | ø rim : ± 300. |
| 19* | D | 101429 | A | Ic | 7.5YR 6/4 | ø rim : ± 280. Pit 2 dug from Ic. |
| 20* | D | 101390 | A | Ic | 5YR 6/6 | ø rim : 275. SALLABERGER 1996, Pl. 1 : 3. |
| 21* | D | 101652 | A | Ic-e | 5YR 6/4 | ø rim : ± 280. |
| 22* | D | 101609 | A | Ie | 10YR 7/3 | ø rim : -. |
| 23 | D | 101758 | A | Ie | 7.5YR 6/4 | ø rim : ± 240. Burial D.56 dug from Ic. |
| 24* | D | 100530 | A | Ig | 5YR 6/6 S : 10YR 7/3 | ø rim : ± 250. |
| 25 | D | 101924 | A | Ig | 7.5YR 6/4 | ø rim : 288. Burial D.45 dug from Ig. |
| 26* | D | 100604 | B | A 12 | 7.5YR 6/4 | ø rim : ± 240. |
| 27* | D | 101686 | A | Ii | 5YR 5/4 | ø rim : ± 240. |

Continued on Pl. 4



20 (view of base)




10 cm

(Photos at various scales)

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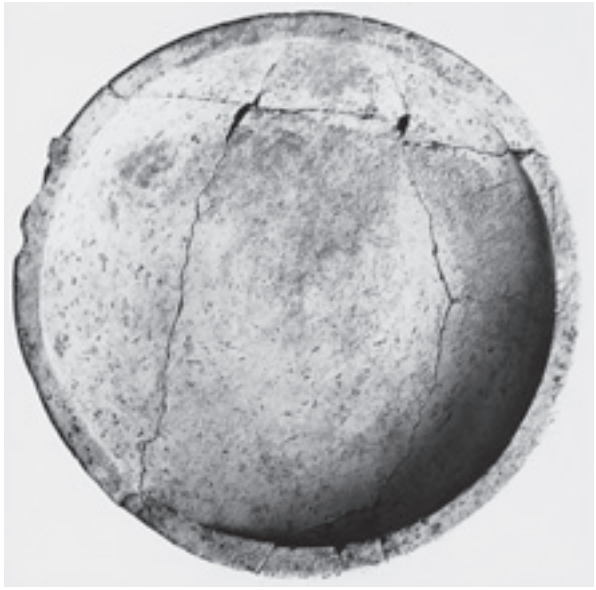
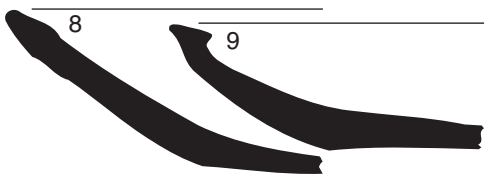
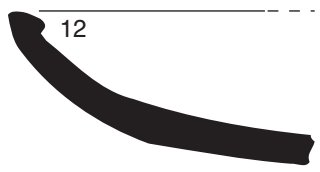
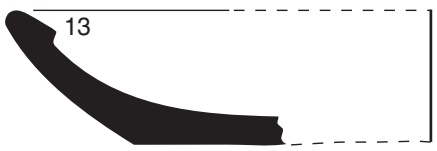
—1500

—1600






14

—1700

—1800

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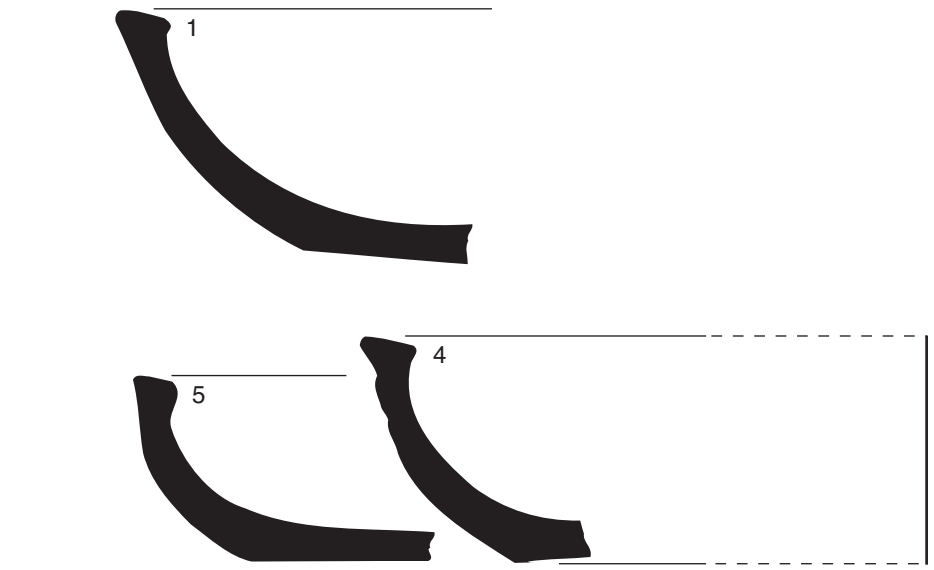
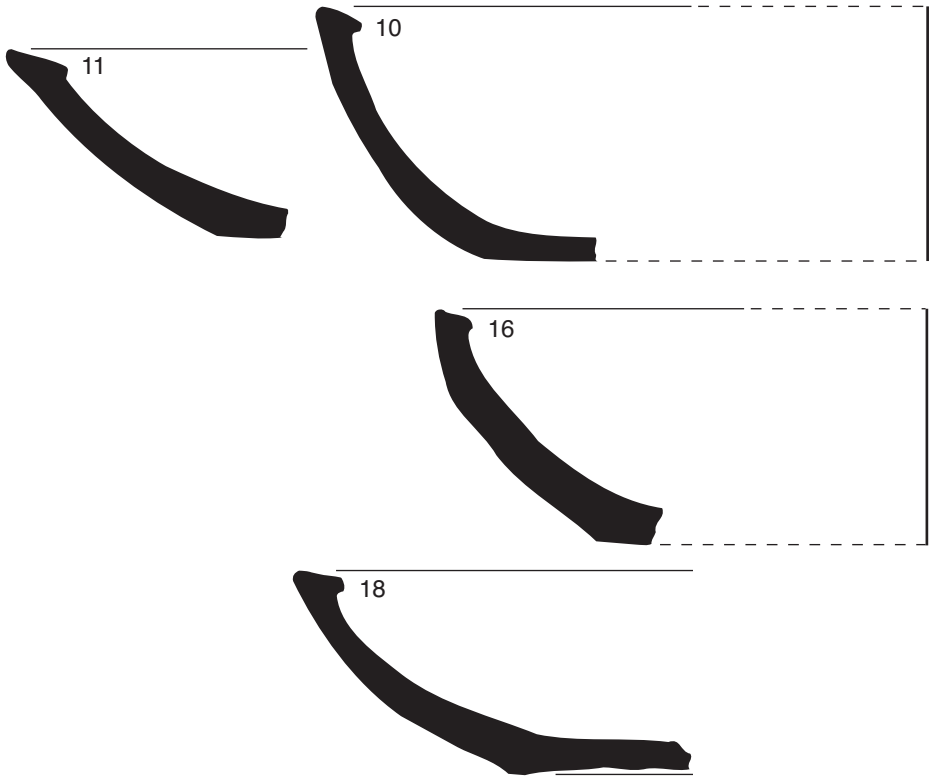
# PLATE 4

5 C 1

Continued from Pl. 3






| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 103399 | E *sud* | 0 | 7.5YR 7/4 | ø rim : -. Pit 2 dug from Ensemble 0. |
| 2* | D | 109474 | E | IIId | 7.5YR 6/4 | ø rim : -. |
| 3 | Dey | A 205.1 | B | IV | 2.5Y 7/4<br>S : 5Y 8/3 | ø rim : -. ARMSTRONG 2001, fig. 8 : c. |
| 4* | D | 106865 | E | IIIe | 10YR 7/3 | ø rim : ± 300. |
| 5* | D | 106863 | E | IIIe | 10YR 7/3 | ø rim : ± 270. |
| 6* | D | 100570 | B | Ia | 10YR 8/3 | ø rim : 210. |
| 7* | D | 100386 | A | Ia | 7.5YR 6/4 | ø rim : ± 250. *TD* 1, Pl. 13 : 8. |
| 8* | D | 100207 | A | Ic | 5YR 6/4 | ø rim : ± 230. *TD* 1, Pl. 13 : 2. |
| 9* | D | 100929 | A | Ic | 7.5YR 6/4 | ø rim : ± 280. |
| 10* | D | 100283 | A | Ic[1)] | 7.5YR 7/4<br>S : 2.5Y 8/2 | ø rim : ± 320. *TD* 1, Pl. 13 : 6. SALLABERGER 1996, Pl. 1 : 6. |
| 11* | D | 100230 | A | Ic | 7.5YR 7/2<br>S : 2.5Y 8/2 | ø rim : ± 250. |
| 12* | D | 100209 | A | Ic | 7.5YR 6/4 | ø rim : ± 230. |
| 13* | D | 101287 | A | Ic | 10YR 7/3 | ø rim : ± 220. |
| 14 | D | 101759 | A | Ie | 7.5YR 7//4 | ø rim : 242. Burial D.56 dug from Ie. |
| 15* | D | 101946 | A | Ie | 2.5Y 7/4 | ø rim : 298. Burial D.40 dug from Ie. |
| 16* | D | 100610 | B | A 12 | 5Y 7/3 | ø rim : ± 260. |
| 17 | D | 101928 | A | Ig | 5YR 5/6 | ø rim : 333. Burial D.44 dug from Ig. |
| 18* | D | 100449 | A | Ig | 10YR 7/3<br>S : 5Y 7/3 | ø rim : ± 320. |
| 19* | D | 100264 | A | Ii | 5YR 5/6 | ø rim : ± 280. |
| 20* | D | 102837 | A | IIc | 10YR 7/4 | ø rim : 270. |

1) See *TD* 2, 38 for the stratigraphical correction.

Continued on Pl. 5

10 cm

(Photos at various scales)

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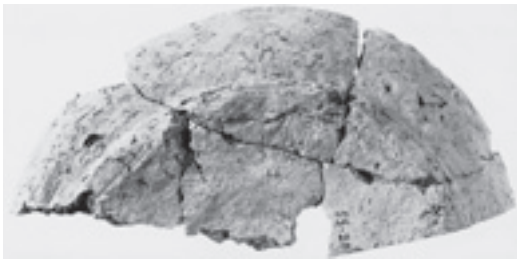
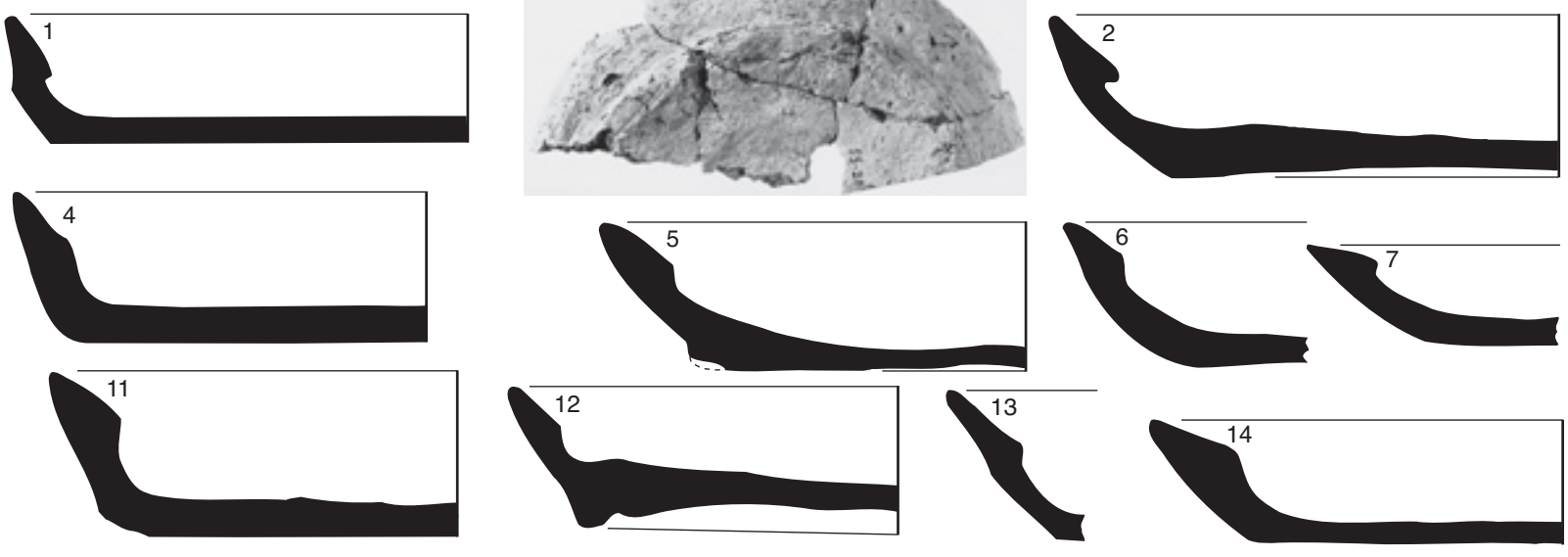
—1600

5






—1700

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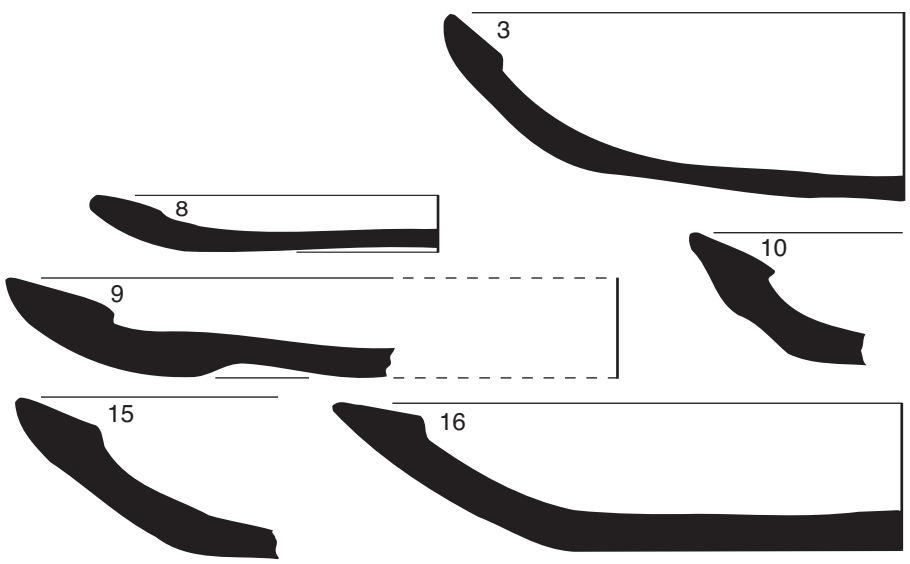
# PLATE 5

5 C 1

Continued from Pl. 4

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | I | - | *NOA* IV | | 10YR 7/4<br>S : 5Y 8/3 | ø rim : 252. *Isin* 3, 75-76, Pl. 28 : 11. |
| 2 | N | 3P 439 | TA | X | tan<br>S : buff | ø rim : 270. *OIP* 78, Pl. 88 : 1. Also in TA XI and XII. |
| 3 | N | B 998 | WB | IV 5 | buff<br>S : cream | ø rim : 244. |
| 4 | W | 20454 | Sînkāšid | 3 | *rot*<br>S : *hellgelb* | ø rim : 220. VAN ESS 1988a, fig. 1 : 6. |
| 5* | L | 59.28 | *Mais.* 59 | *Sols* | 10YR 8/3 | ø rim : 230. Exc. Huot. CALVET 2003, fig. 63. Redrawn. |
| 6 | N | B 1011 | WB | IV 5 | greenish-buff | ø rim : -. |
| 7 | N | B 935 | WB | IV 5-6 | red | ø rim : ± 200. |
| 8 | N | 3P 396 | TA | X | tan<br>S : buff | ø rim : 188. *OIP* 78, Pl. 93 : 1. |
| 9 | W | 19643c | Sînkāšid | 4 | *rot*<br>S : *hellgelb* | ø rim : ± 320. VAN ESS 1988a, fig. 1 : 2. |
| 10 | N | B 158 | WB | IV 2-3 | pink | ø rim : -. |
| 11 | L | 27.277 | *Mais.* 27 | *Sols* | *rouge* | ø rim : 220. Exc. Huot. CALVET 2003, fig. 52 and Pls. 19 : c and 35 : a (left). |
| 12 | L | 27.162 | *Mais.* 27 | *Sols* | *jaune* | ø rim : 212. Burial under Room 19 of Mais. 27. Exc. Huot. CALVET 2003, fig. 53 and Pl. 20 : b. |
| 13 | N | B 905 | WB | IV 2 | pink<br>S : buff | ø rim : -. |
| 14 | N | B 974 | WB | IV 4 | pink | ø rim : 220. FRANKE 1978, fig. 59 : 2d. |
| 15 | N | B 937 | WB | IV 2 | pink<br>S : pinkish-buff | ø rim : -. |
| 16 | W | 19897 | Sînkāšid | 4 | *rot*<br>S : *hellgelb* | ø rim : 304. VAN ESS 1988a, fig. 1 : 3. |

Continued on Pl. 6



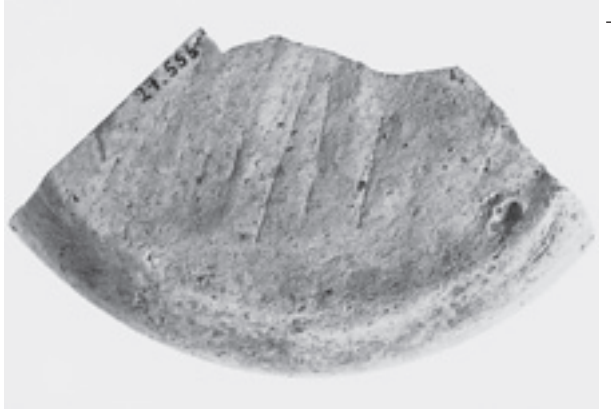

10 cm

(Photos at various scales)

5 C 1

4

(view of base)



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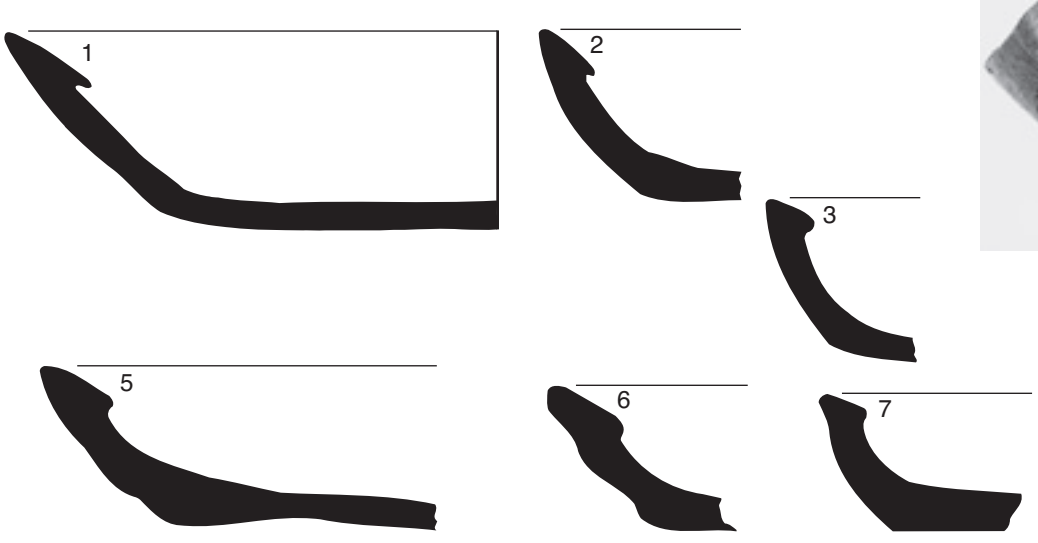


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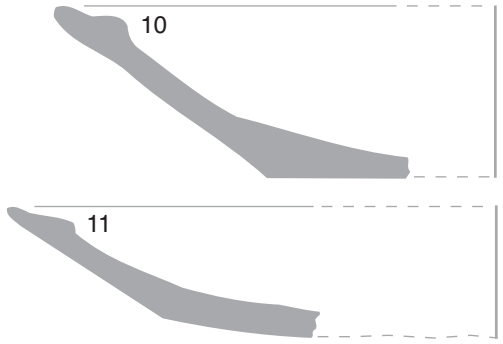
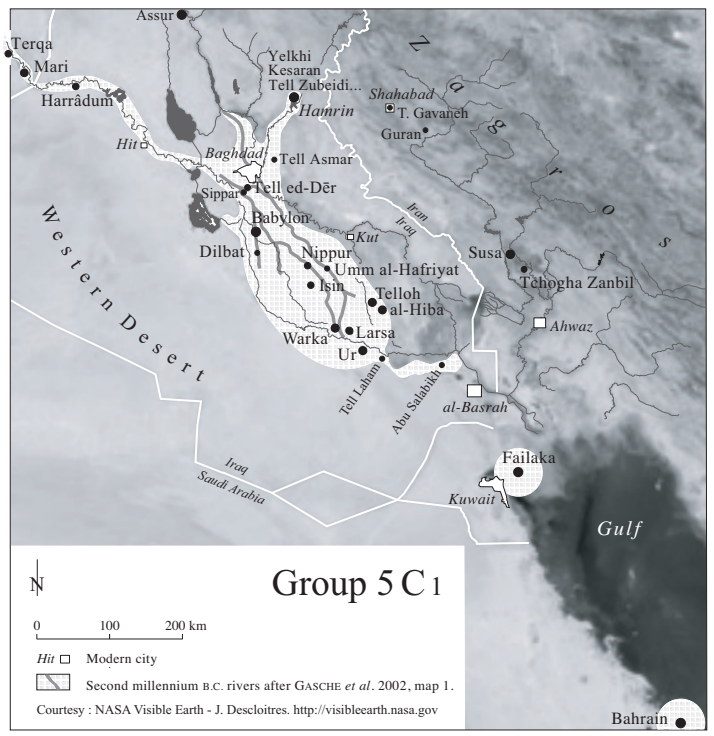
# PLATE 6

## 5 C 1

Continued from Pl. 5

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | N | B 99 | WB | IV 6 | light buff | ø rim : 258. FRANKE 1978, fig. 59 : 2b. |
| 2 | N | A 2101 | WB | IV 6 | buff | ø rim : -. |
| 3 | N | A 5000 | WB | IV 2 | greenish-buff | ø rim : -. |
| 4* | L | 27.556 | *Mais.* 27 | *Sols* | 7.5YR 7/4 | ø rim : ± 240. Exc. Huot. CALVET 2003, fig. 56. Redrawn. |
| 5 | N | B 965 | WB | IV 3 | red | ø rim : -. |
| 6 | N | B 1008 | WB | IV 2 | pink<br>S : buff | ø rim : -. |
| 7* | L | 59.80 | *Mais.* 59 | *Sols* | 5YR 7/6 | ø rim : -. Exc. Huot. CALVET 2003, fig. 65. Redrawn. |
| MIDDLE EUPHRATES | | | | | | |
| 8* | M | III H1 NE4 | F | 0 | 2.5YR 5/6 | ø rim : 314. PONS 1999b, fig. 2 : 5 (No. 251493). |
| 9* | M | III J2-J3 | F | 0 | 5YR 7/3 | ø rim : -. PONS 1999a, 110-111, Pl. 3 : 7 (No. 252671). |
| DIYALA | | | | | | |
| 10 | Yel | y 27 | B | IIIb | *rossastro* | ø rim : ± 232. GABUTTI 2002-03, Pl. 25 : 5. |
| 11 | Yel | y 420 | B | IIIb-IVa | *rossastro* | ø rim : ± 260. GABUTTI 2002-03, Pl. 25 : 7. |






10 cm

(Photos at various scales)

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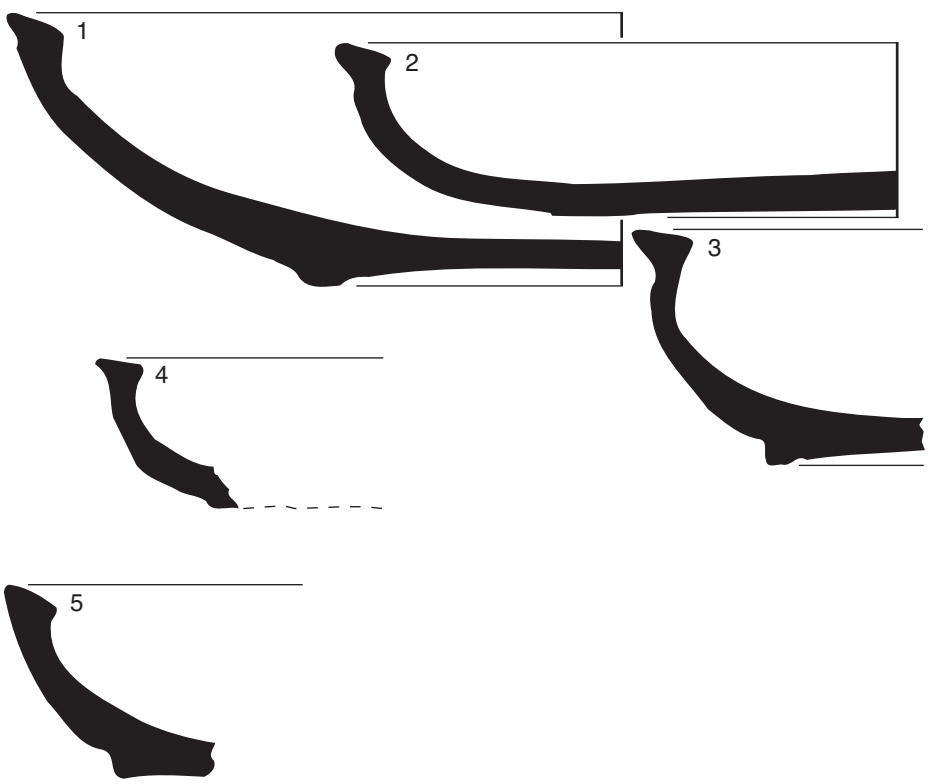
5 C 2

—1500

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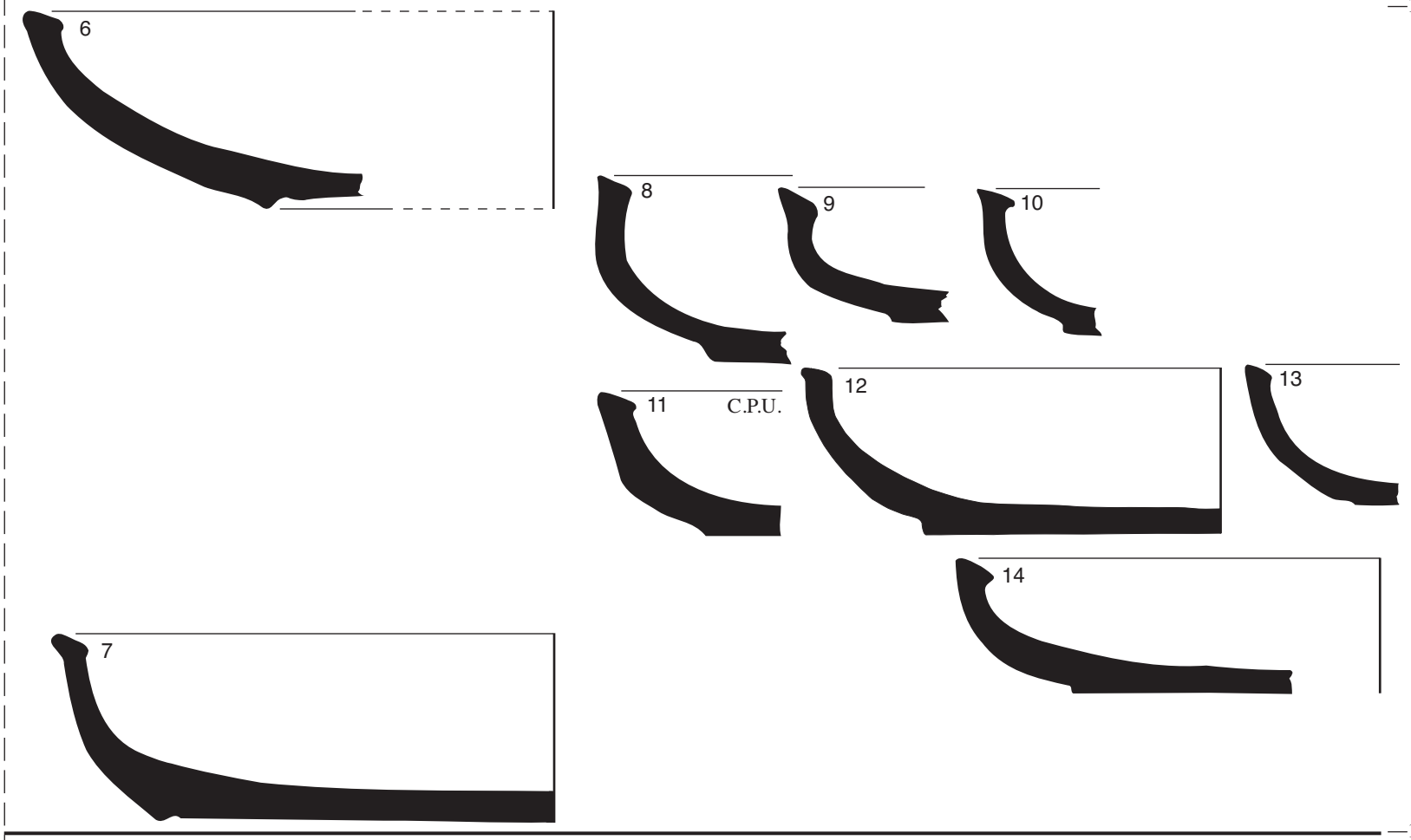


—1700

NORTHERN ALLUVIAL PLAIN

SOUTHERN ALLUVIAL PLAIN

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5 C 2



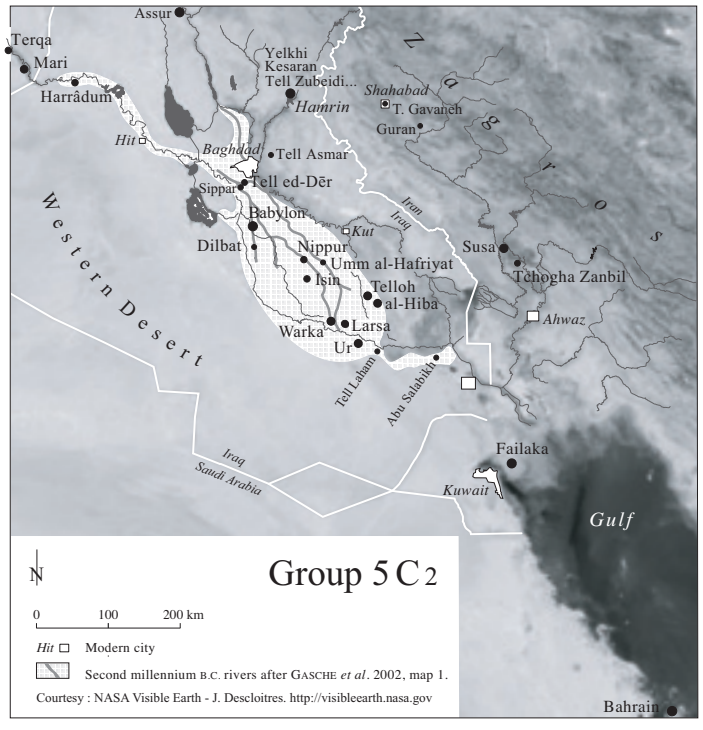

MIDDLE EUPHRATES

# PLATE 7

## 5 C 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 104408 | E | IIIb | 2.5Y 8/2 | ø rim : 324. Burial D.273 dug from IIIb. *MHEM* 1, Pls. 24 and 25 : 44. SALLABERGER 1996, Pl. 1 : 8. |
| 2* | D | 103269 | E *sud* | 0 | 5YR 5/6 | ø rim : 295. Burial D.203 dug from Ensemble 0. |
| 3* | D | 104012 | E | IIIb-d | 2.5YR 6/4 | ø rim : -. |
| 4* | D | 109501 | E | IIId | 7.5YR 6/4 | ø rim : -. |
| 5* | D | 109502 | E | IIIe | 7.5YR 8/4 | ø rim : -. |
| 6* | D | 100251 | A | Ia | 10YR 7/3 | ø rim : ± 320. *TD* 1, Pl. 13 : 7. |
| 7* | D | 101020 | A | Ie | 7.5YR 6/4 | ø rim : 305. *TD* 2, Pl. 18 : 13. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 8 | N | B 950 | WB | IV 6 | buff | ø rim : -. |
| 9 | N | A 2116 | WB | IV 6 | buff | ø rim : -. |
| 10 | N | B 952 | WB | IV 6 | buff | ø rim : -. |
| 11 | I | - | - | - | - | ø rim : -. |
| 12 | I | - | *NOA* III | - | 7.5YR 8/6<br>S : 10YR 8/3 | ø rim : 256. *Isin* 3, 76, Pl. 28 : 13. |
| 13 | N | B 87 | WB | IV 4 | pink<br>S : buff | ø rim : -. |
| 14 | L | 27.109 | *Mais*. 27 | *Rempl.* | *jaune* | ø rim : 262. Exc. Huot. CALVET 2003, fig. 48. |
| MIDDLE EUPHRATES | | | | | | |
| 15 | Din | V 243 | *Bât*. 15 | 3C | *beige* | ø rim : 348. *Haradum* 1, fig. 120 : 7. |

C.P.U. = Chronological Position Uncertain




10 cm

(Photos at various scales)

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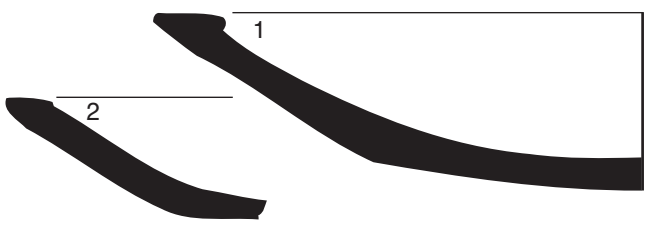
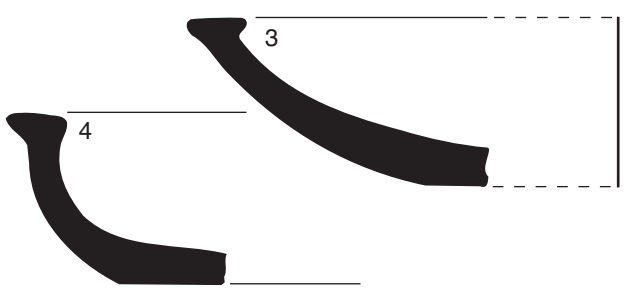
—1500

5 D 1

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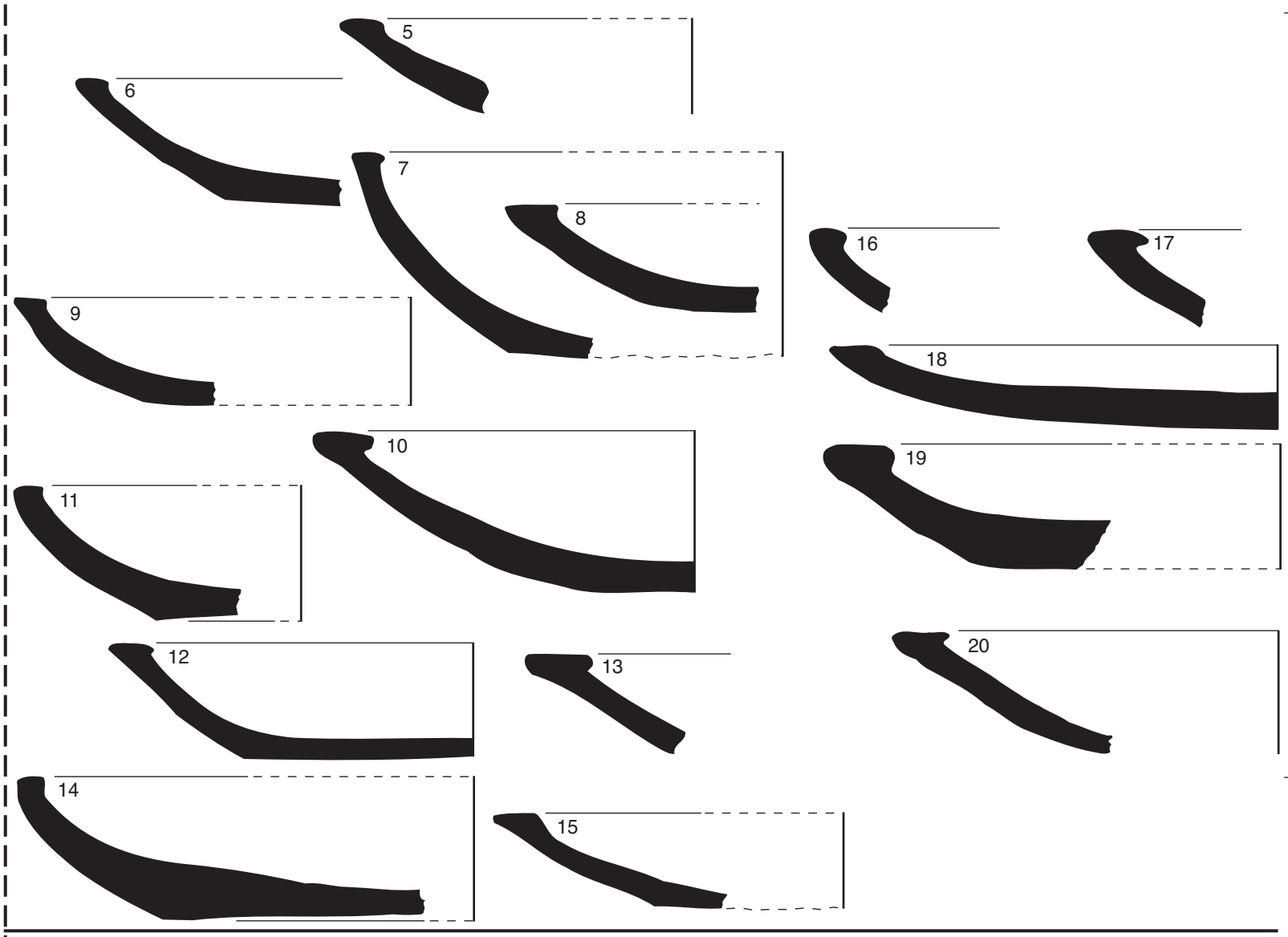


—1700

NORTHERN ALLUVIAL PLAIN SOUTHERN ALLUVIAL PLAIN

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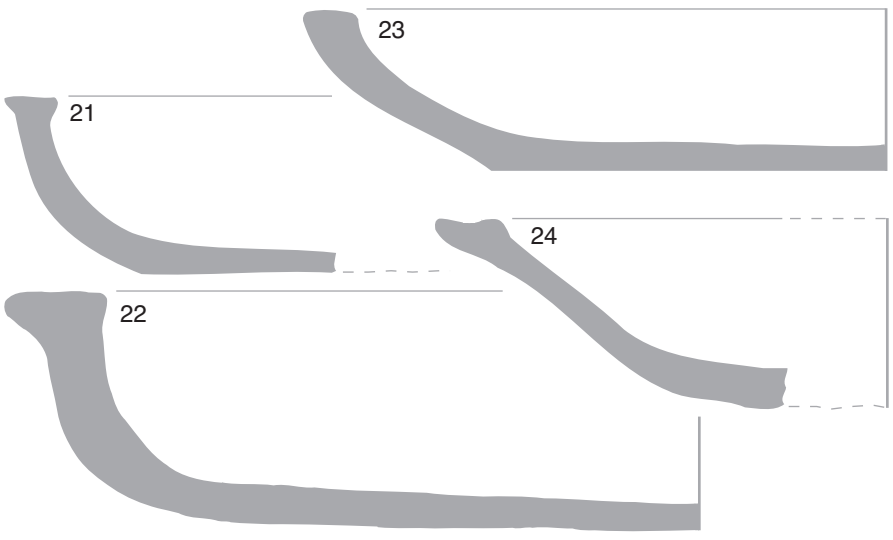
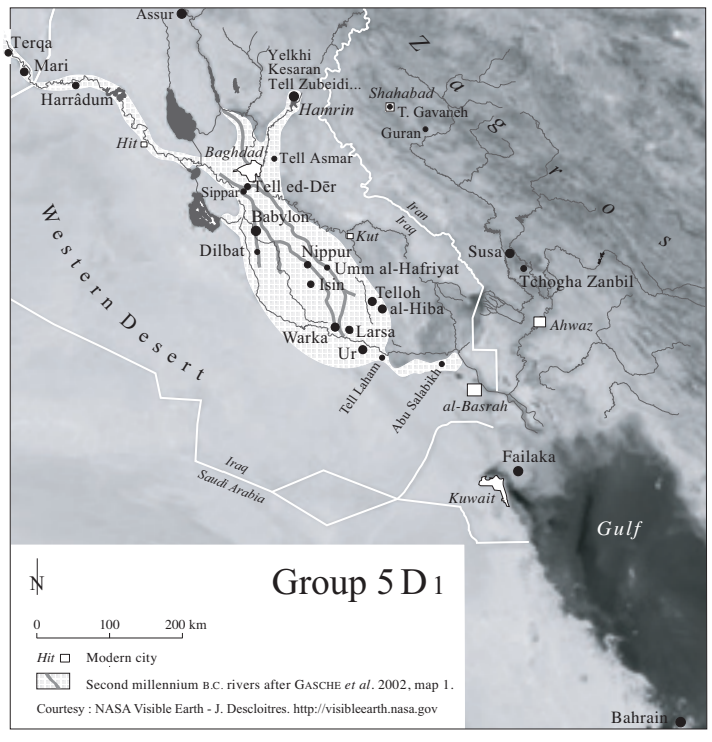
# PLATE 8

## 5 D 1

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 106891 | E | IIIc | 5YR 7/6 | ø rim : 260. |
| 2* | D | 109470 | E | IIId | 7.5YR 6/3 | ø rim : -. In fill of small pit. |
| 3* | D | 106791 | E | V | 5YR 6/4 | ø rim : ± 230. |
| 4* | D | 109587 | F | Ia | 10YR 8/2 | ø rim : ± 320. |
| 5* | D | 100011 | A | Ia-d | 10YR 7/3 | ø rim : ± 230. |
| 6* | D | 100009 | A | Ia-d | 5YR 6/4 | ø rim : ± 260. |
| 7* | D | 100225 | A | Ic | 2.5Y 8/2 | ø rim : ± 280. *TD* 1, Pl. 13 : 4.[1)] |
| 8* | D | 101419 | A | Ic | 5YR 5/6 | ø rim : ± 255. Pit 2 dug from Ic. |
| 9* | D | 100937 | A | Ic | 7.5YR 6/4 | ø rim : ± 260. |
| 10* | D | 101329 | A | Ic | 5YR 6/6 | ø rim : 250. Burial D.25 probably dug from Ic. |
| 11* | D | 100920 | A | Id | 10YR 7/3 | ø rim : ± 220. |
| 12* | D | 100780 | B | IIb | 5YR 5/6 | ø rim : 240. Burial D.12 dug from IIb. SALLABERGER 1996, Pl. 1 : 5. |
| 13* | D | 100954 | A | Ie | 7.5YR 5/2<br>S : 7.5YR 6/4 | ø rim : ± 280. |
| 14* | D | 100448 | A | Ig[1)] | 5YR 6/6 | ø rim : ± 300. *TD* 1, Pl. 13 : 5. |
| 15* | D | 100532 | A | Ig[1)] | 7.5YR 7/4<br>S : 10YR 8/3 | ø rim : ± 230. *TD* 1, Pl. 13 : 3. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 16 | U | 83 | A | I | pink<br>S : cream | ø rim : ± 260. |
| 17 | U | 83 | A | I | pink<br>S : cream | ø rim : ± 280. |
| 18 | W | 20029n | Sînkāšid | 3[2)] | - | ø rim : 63. Disturbed Burial 50, under Room 16 of the palace. *AUWE* 10, Pl. 29 : n = VAN ESS 1988a, fig. 1 : 4. |
| 19* | L | 27.533 | *Mais.* 27 | *Rempl.* | 5YR 7/4 | ø rim : ± 300. Exc. Huot. CALVET 2003, fig. 49. Redrawn. |
| 20 | H | 1 HP 531 | B | - | - | ø rim : 256. |
| MIDDLE EUPHRATES | | | | | | |
| 21 | Din | V 475 | *Bât.* 1 | 3C | *rose* | ø rim : ± 365. *Haradum* 1, fig. 120 : 9. |
| 22 | M | IX Q50 NE12 | A | 2 | *orange* | ø rim : 367. Burial IX Q50 NET6. JEAN-MARIE 1999, 167, Pl. 132 (*tombe* 736). LEBEAU 1983, 167, 174, fig. 9 : 2. |
| DIYALA | | | | | | |
| 23 | Yel | y 9 | B | IVa | - | ø rim : 308. GABUTTI 2002-03, Pl. 26 : 8. |
| 24 | Yel | y 455 | A | IVb | *cuoio* | ø rim : ± 240. GABUTTI 2002-03, Pl. 25 : 11. |

1) See *TD* 2, 38 for the stratigraphical correction.
2) Based on the locations of the 18 vessels (W 20029a to r) found in the debris of Burial 50, VAN ESS (1988a, 370-390) has attributed them to different stratigraphical units. Besides No. 18 above, our Pls. 48 : 6, 52 : 15, 53 : 4, 81 : 6, 105 : 7, 127 : 5, and 128 : 10 and 14 are affected.




10 cm

(Photos at various scales)

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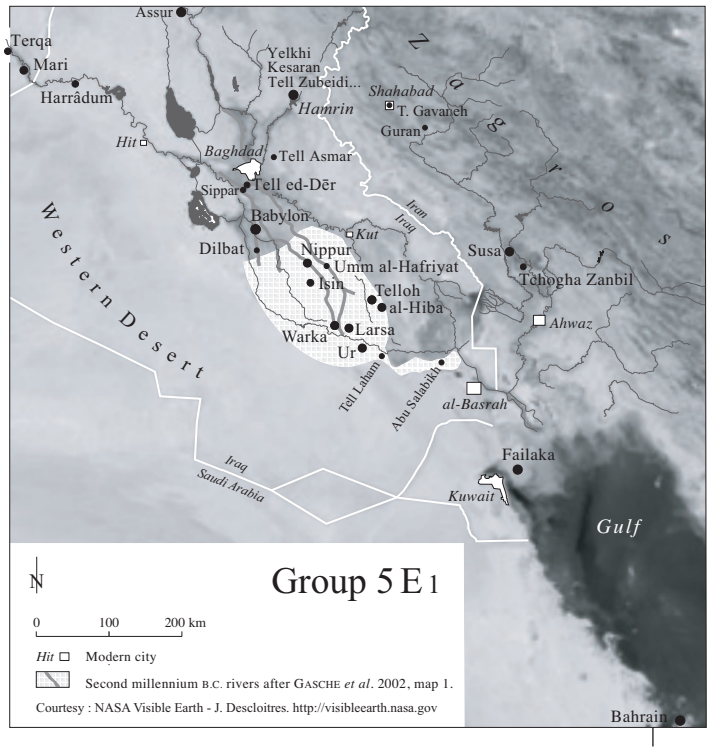
5 D 2

5 E 1

—1500

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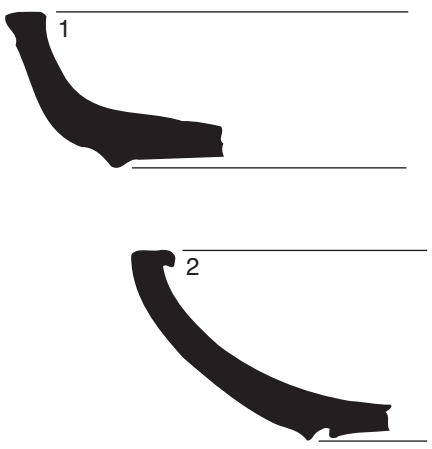


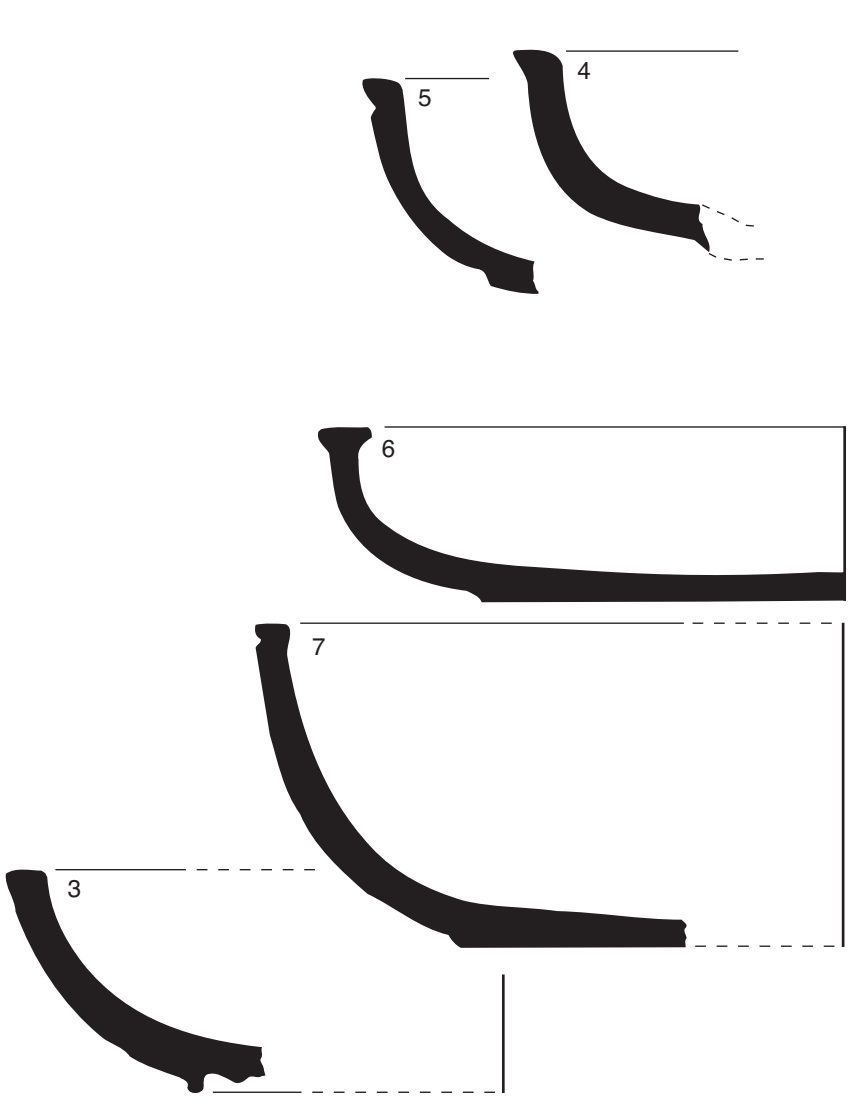


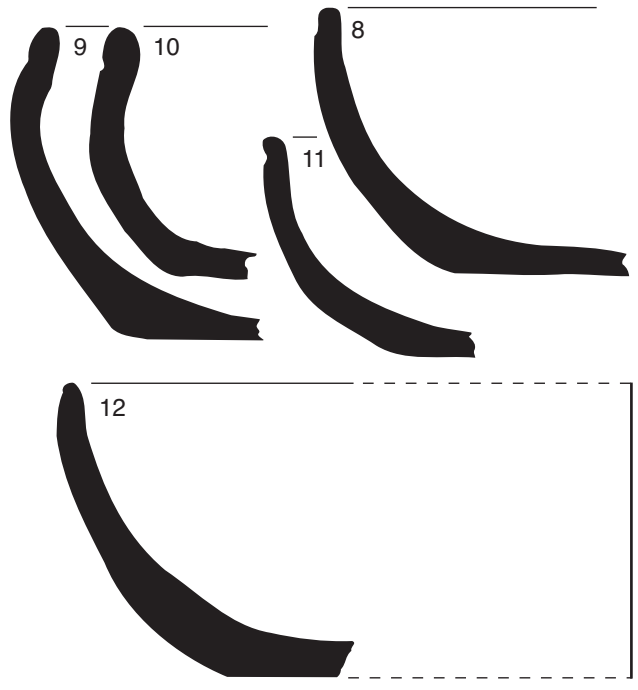


—1700

N. A. P. S. A. P. SOUTHERN ALLUVIAL PLAIN

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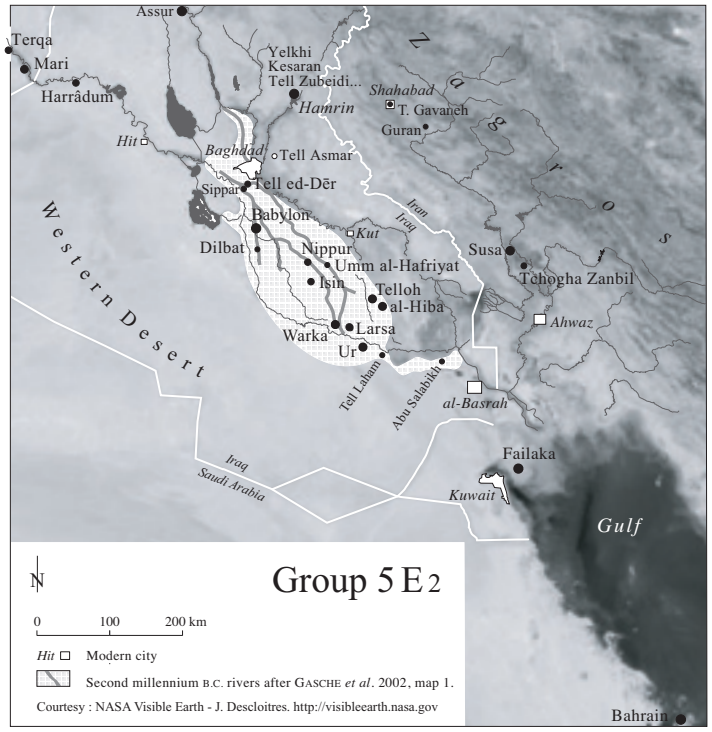
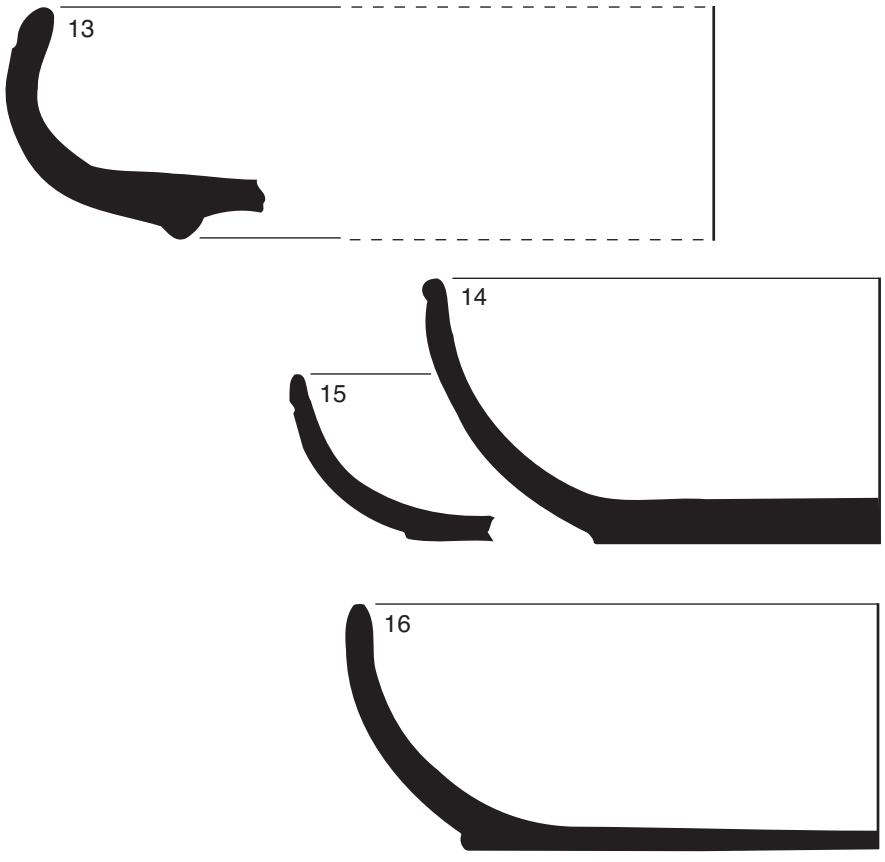
# PLATE 9

## 5 E 2




N. A. P. S. A. P.

## 5 D 2

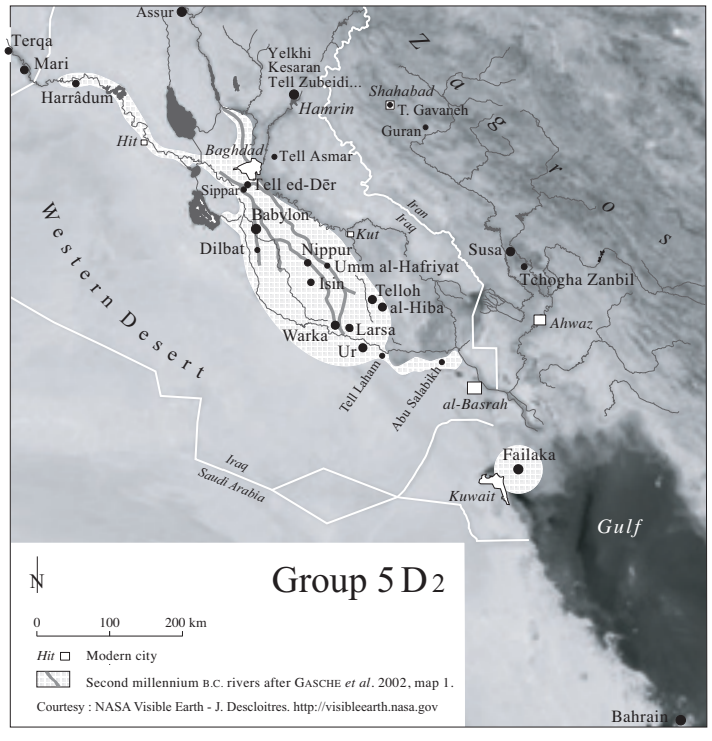
| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 106858 | E | IIId-f | 5YR 6/4<br>S : 7.5YR 8/4 | ø rim : -. *MHEM* 1, Pl. 25 : 45. |
| 2* | D | 109491 | E | IIIe | 5YR 6.5/4 | ø rim : -. |
| 3* | D | 101023 | A | Ie | 5YR 6/6 | ø rim : ± 260. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 4 | N | B 1011 | WB | IV 5 | buff | ø rim : -. |
| 5 | N | A 2016 | WB | IV 4 | buff | ø rim : -. |
| 6 | W | 20453 | Sînkāšid | 3 | - | ø rim : 276. VAN ESS 1988a, fig. 1 : 9. |
| 7 | H | 1 HP 631 | B | | - | ø rim : ± 310. |

## 5 E 1

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 8 | N | B 166 | WB | IV 4 | light buff | ø rim : 243. FRANKE 1978, fig. 59 : 2c. Axis not shown. |
| 9 | N | A 2033 | WB | IV 3 | buff | ø rim : -. |
| 10 | N | A 2001 | WB | IV 3 | pink<br>S : buff | ø rim : -. |
| 11 | N | A 2002 | WB | IV 2 | pink<br>S : buff | ø rim : -. |
| 12* | L | 59.117 | *Mais.* 59 | *Sols* | 5YR 8/4 | ø rim : ± 300. Exc. Huot. CALVET 2003, fig. 66. Redrawn. |

## 5 E 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 13* | D | 101141 | A | 0 | 10YR 8/2 | ø rim : ± 360. Pit 1 (cf. *TD* 2, Plan 6) now attributed to Ensemble 0. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 14 | I | 0284 | *NOA* IV | 6,39m | 2.5Y 8/4 | ø rim : 240. Burial 127. |
| 15 | N | A 2073 | WB | IV 5 | buff | ø rim : -. |
| 16 | L | 27.216 | *Mais.* 27 | *Sols* | *jaune* | ø rim : 284. Exc. Huot. CALVET 2003, fig. 52. |




10 cm

(Photos at various scales)

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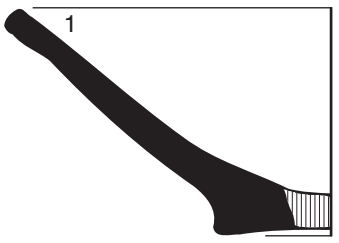
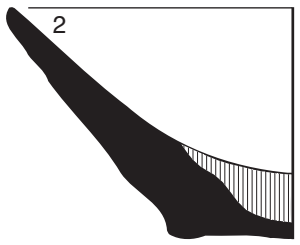
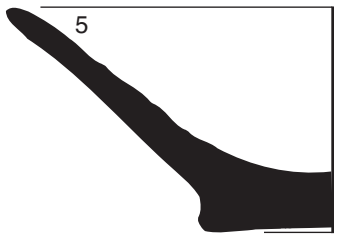
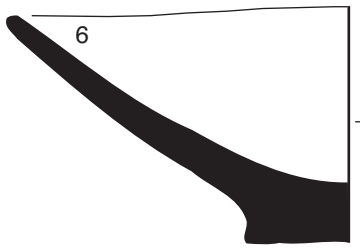
—1200

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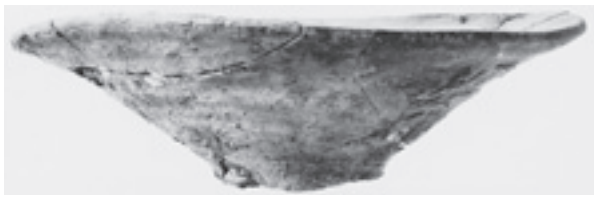
6

—1400

9



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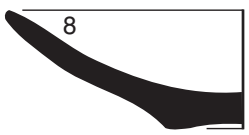


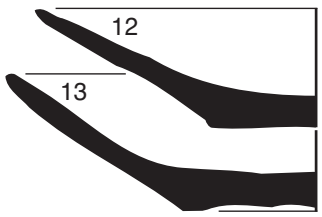


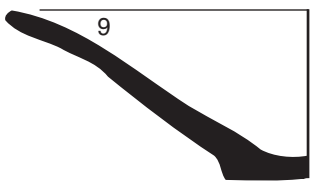


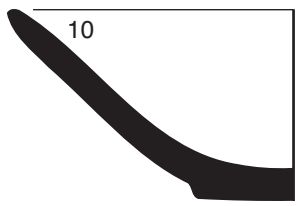


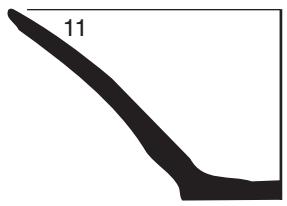

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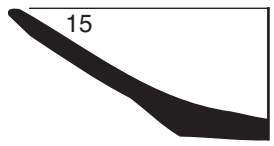
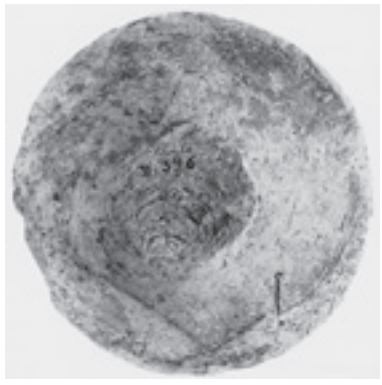
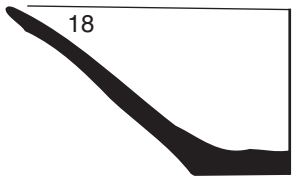
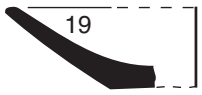


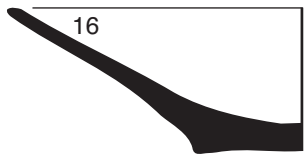



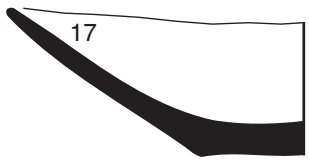
17 (view of base)

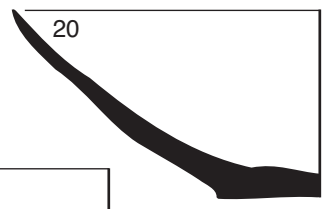
—1600

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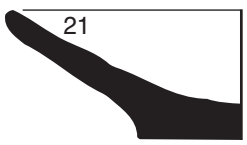


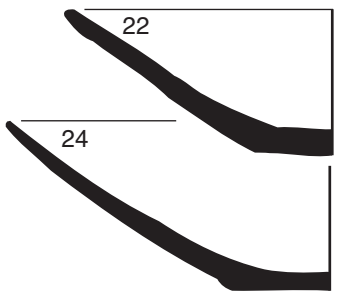


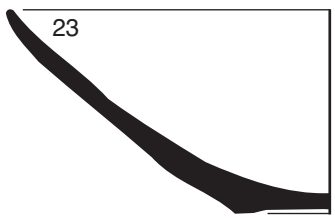




—1800

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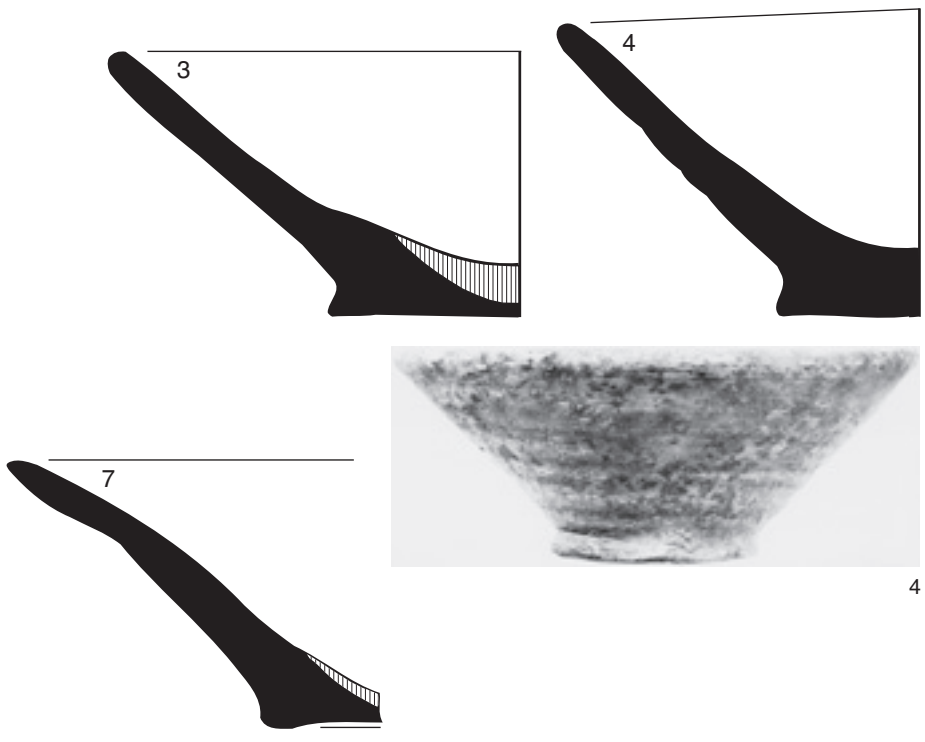
# PLATE 10

## 10 A 1






4

NORTHERN ALLUVIAL PLAIN

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| 1* | D | 107705 | E3 | 0 | 7.5YR 8/6 | ø rim : 172. Filled-in base. Pit 4 dug from Ensemble 0. |
| 2* | D | 107674 | E3 | 0 | 5YR 7/4 | ø rim : 149. Filled-in base. Pit 1 dug from Ensemble 0. *NAPR* 6, Pl. 9 : 4. |
| 3* | D | 107560 | E3 | 0 | 2.5Y 8/2 | ø rim : 216. Filled-in base. Pit 1 dug. from Ensemble 0. *NAPR* 6, Pl. 9 : 3. |
| 4 | D | 107287 | E3 | 0 | 10YR 8/2 | ø rim : 194. Burial D.337B dug from Ens. 0. GASCHE 1991, 27, fig. 5 : 3. |
| 5 | Dey | 1 D 17 | B | I | 2.5Y 8/2 | ø rim : 172. Burial 3 dug from I. |
| 6 | D | 107477 | E3 | Ia0 | 2.5Y 8/4 | ø rim : 182. Burial D.368 dug from Ia0. GASCHE 1991, 27, fig. 7 : 3. |
| 7* | D | 109515 | E3 | Ib | 10YR 8/2 | ø rim : -. Filled-in base. *NAPR* 6, Pl. 7 : 1. |
| 8* | D | 104059 | E | IIIb | 7.5YR 7/4 | ø rim : 125. *MHEM* 1, Pl. 26 : 1. |
| 9* | D | 103938 | E | IIIb | 5YR 6/4 | ø rim : 155-162. |
| 10* | D | 103951 | E | IIIb | 5YR 6/6 | ø rim : 170. Burial D.243 probably dug from IIIb. *MHEM* 1, Pls. 24 and 26 : 5. |
| 11* | D | 103261 | E *sud* | 0 | 7.5YR 6/4 | ø rim : 180. Burial D.202 dug from Ensemble 0. |
| 12 | Dey | 1 D 21 | B | II | 5Y 7/3 | ø rim : 148. ARMSTRONG 2001, fig. 8 : g. |
| 13* | D | 104402 | E | IIId | 5YR 6/4 | ø rim : 162. Burial D.274 probably dug from IIId. *MHEM* 1, Pls. 17 and 26 : 2. |
| 14* | D | 103945 | E | IIId-e | 7.5YR 6/4 | ø rim : 97. |
| 15* | D | 100173 | A | Ia | 7.5YR 6/4 S : 2.5Y 7/2 | ø rim : 135. |
| 16* | D | 101284 | A | Ic | 7.5YR 6/4 | ø rim : 152. |
| 17* | D | 100396 | A | Ic[1)] | 5Y 7/3 | ø rim : 155. *TD* 1, Pl. 11 : 3. |
| 18* | D | 101244 | A | Ic | 10YR 8/4 | ø rim : 149. |
| 19* | D | 100395 | A | Ic[1)] | 5YR 6/4 | ø rim : ± 105. *TD* 1, Pl. 11 : 2. |
| 20* | D | 102648 | A | Ie | 5YR 6/6 | ø rim : 163. Burial D.174 dug from Ie. |
| 21* | D | 101835 | A | Ig | 7.5YR 7/4 | ø rim : 123. |
| 22* | D | 101803 | A | Ig | 10YR 7/3 | ø rim : 140. Burial D.67 dug from Ig. |
| 23* | D | 101952 | A | Ig | 5YR 6/4 | ø rim : 170. Burial D.94 dug from Ig. |
| 24* | D | 101495 | A | Ih | 7.5YR 7/4 | ø rim : 170. |

1) See *TD* 2, 38 for the stratigraphical correction.

Continued on Pl. 11

10 cm

(Photos at various scales)

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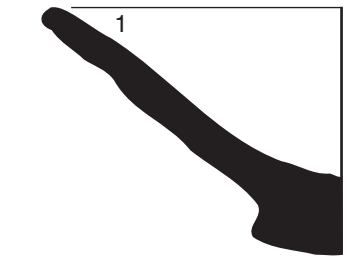
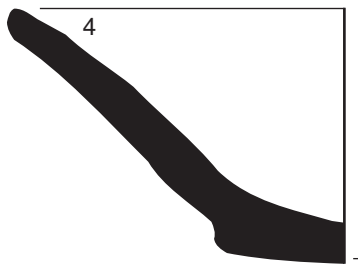
—1200

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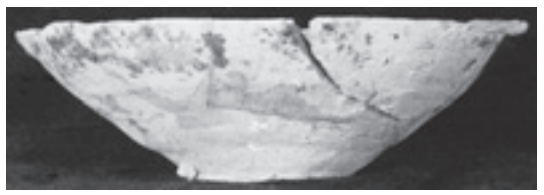
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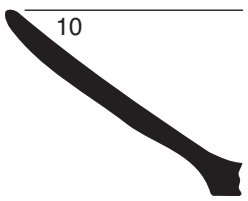


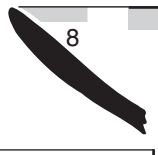


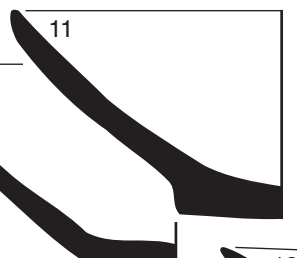


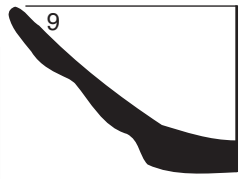


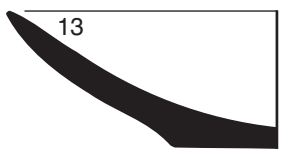


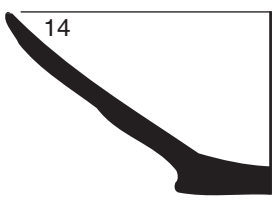


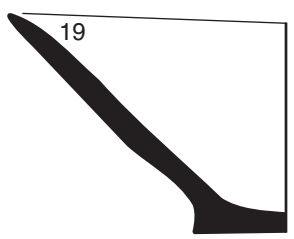


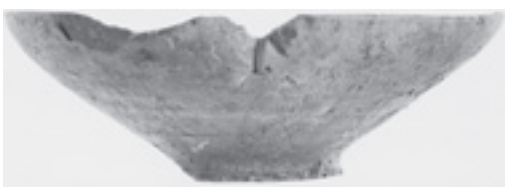
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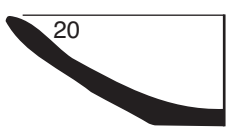


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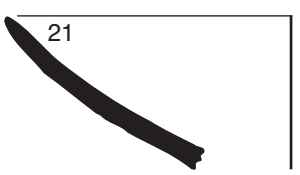


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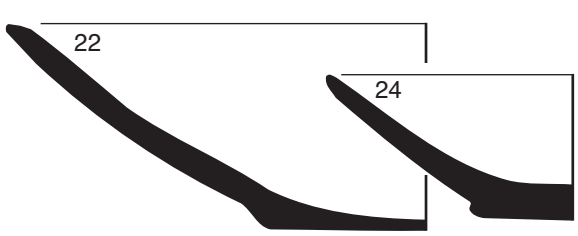


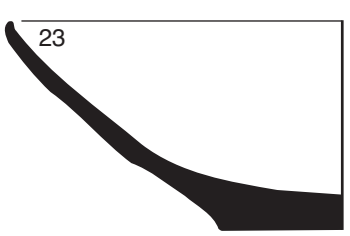


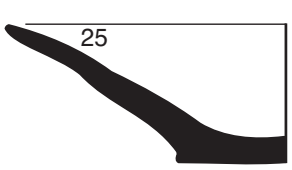


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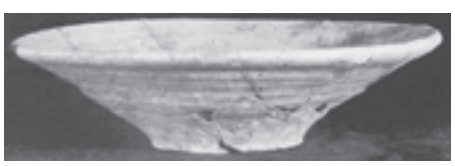
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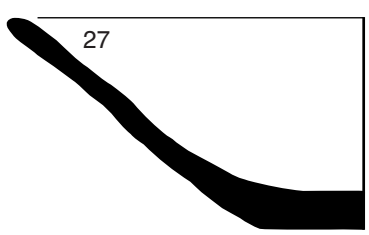


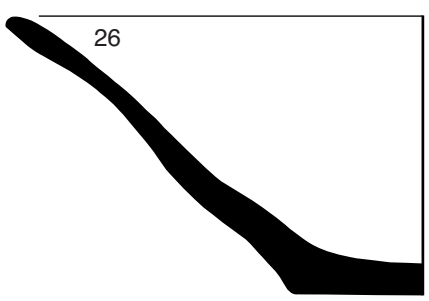


—2000

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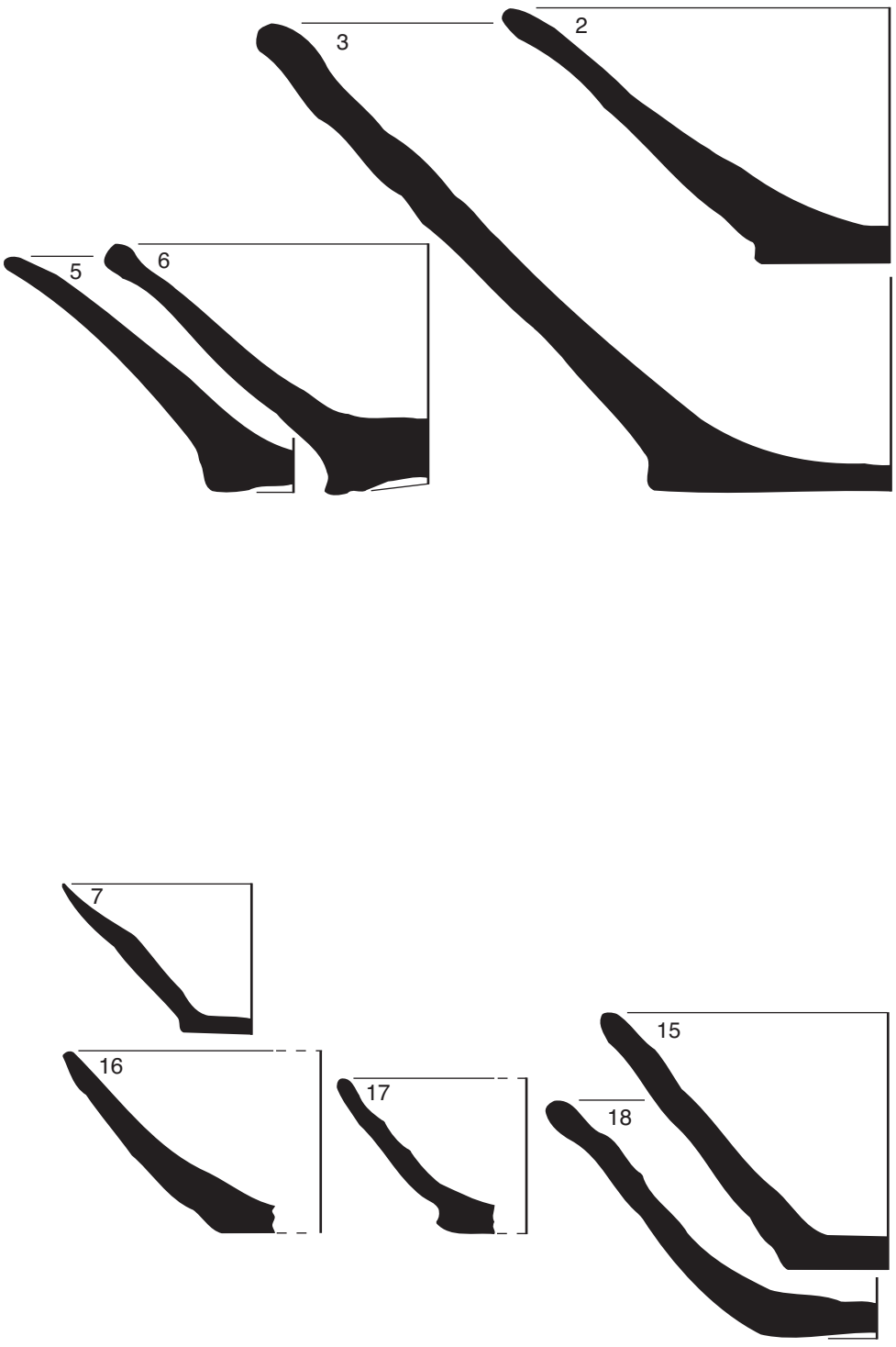
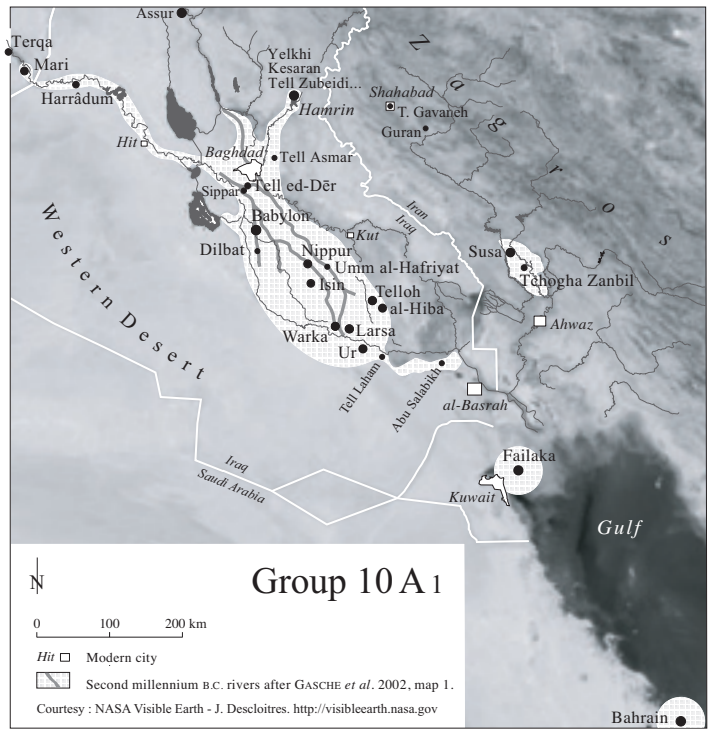
# 10 A 1

Continued from Pl. 10




| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | N | 14 N 57 | WC-1 | II | - | ø rim : 158. |
| 2 | N | D 86 | WC-1 | II | - | ø rim : 223. *MHEM* 4, Pl. 1 : 18. |
| 3 | N | B 152 | WB | II | - | ø rim : 368. |
| 4 | N | 13 N 74 | WC-1 | III | - | ø rim : 176. |
| 5 | N | 14 N 305 | WC-1 | III | - | ø rim : 165. |
| 6 | N | 14 N 299 | WC-1 | III | - | ø rim : 186. |
| 7 | N | 12 N 291 | WB | IV 6 | pinkish-buff | ø rim : 108. |
| 8 | N | B 2040 | WB | IV 3 | buff | ø rim : ± 120. Dark-painted band over rim. |
| 9 | N | 12 N 759 | WB | IV 3 | buff<br>S : cream | ø rim : 120. |
| 10 | U | 83 | A | I | - | ø rim : ± 160. |
| 11 | N | 12 N 722 | WB | IV 2 | pink<br>S : cream | ø rim : 141. |
| 12 | N | 12 N 465 | WB | IV 1 | reddish-buff<br>S : cream | ø rim : 153. |
| 13 | L | 27.75 | *Mais.* 27 | *Rempl.* | *jaune* | ø rim : 142. Exc. Huot. CALVET 2003, fig. 47. |
| 14* | L | 59.27 | *Mais.* 59 | *Sols* | 7.5YR 7/4 | ø rim : 140. Exc. Huot. CALVET 2003, fig. 63. Redrawn. |
| 15 | L | 27.276 | *Mais.* 27 | *Sols* | *rouge* | ø rim : 168. Exc. Huot. CALVET 2003, fig. 52 and Pl. 35 : a (right). |
| 16* | L | 59.84 | *Mais.* 59 | *Rempl.* | 7.5YR 7/4 | ø rim : ± 145. Exc. Huot. CALVET 2003, fig. 60. Redrawn. |
| 17* | L | 59.21 | *Mais.* 59 | *Rempl.* | 7.5YR 8/4 | ø rim : ± 110. Exc. Huot. CALVET 2003, fig. 60. Redrawn. |
| 18* | L | 59.47 | *Mais.* 59 | - | 7.5YR 8/4 | ø rim : 188. Redrawn. |
| 19 | H | 4 H 26b | B | - | 5YR 7/6 | ø rim : 147. |
| 20 | N | B 731 | WA | V | reddish-buff | ø rim : 116. |
| 21 | H | 1 HP 589 | B | | - | ø rim : 150. |
| 22 | N | B 715 | WA | VIA | reddish-buff | ø rim : 220. |
| 23 | H | 1 H 60 | B | - | reddish-brown | ø rim : 178. |
| 24 | N | B 593 | WA | VIA | reddish-buff | ø rim : 130. |
| 25 | N | 12 N 706 | WA | VIA | reddish-buff | ø rim : 147. |
| 26 | N | 3P 343 | TB | VII 2 | tan<br>S : buff | ø rim : 221. *OIP* 78, Pl. 82 : 13. |
| 27 | N | 14 N 379 | WC-3 | VB | - | ø rim : 196. Burial 78 dug from VB. |

Continued on Pl. 12




10 cm

(Photos at various scales)

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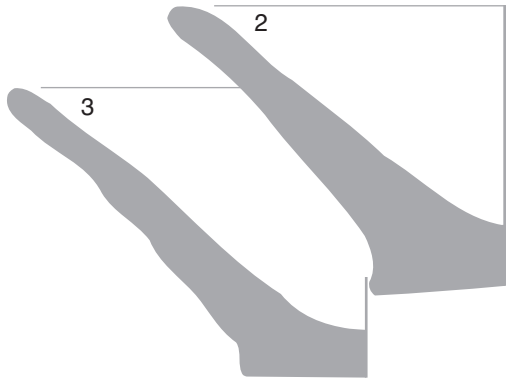
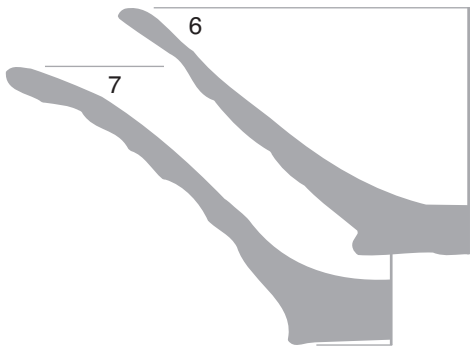
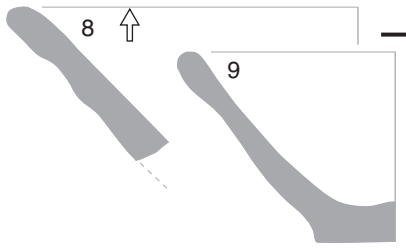
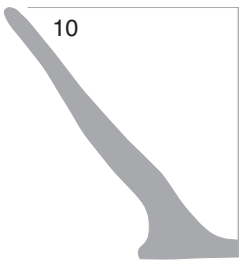
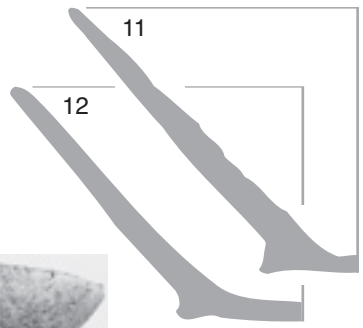
10 A 1



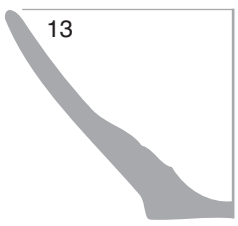



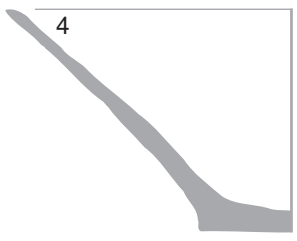



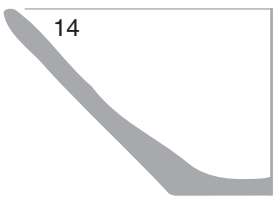



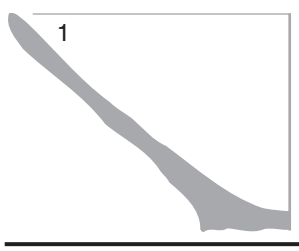



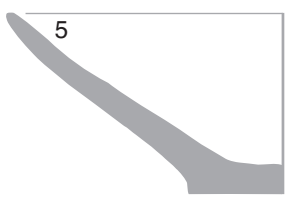

12

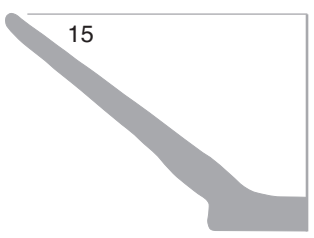



—1100
—1200
—1300
—1400
—1500
—1600
—1700
—1800
—1900
—2000

◄◄ M. E. DIYALA GULF SUSIANA

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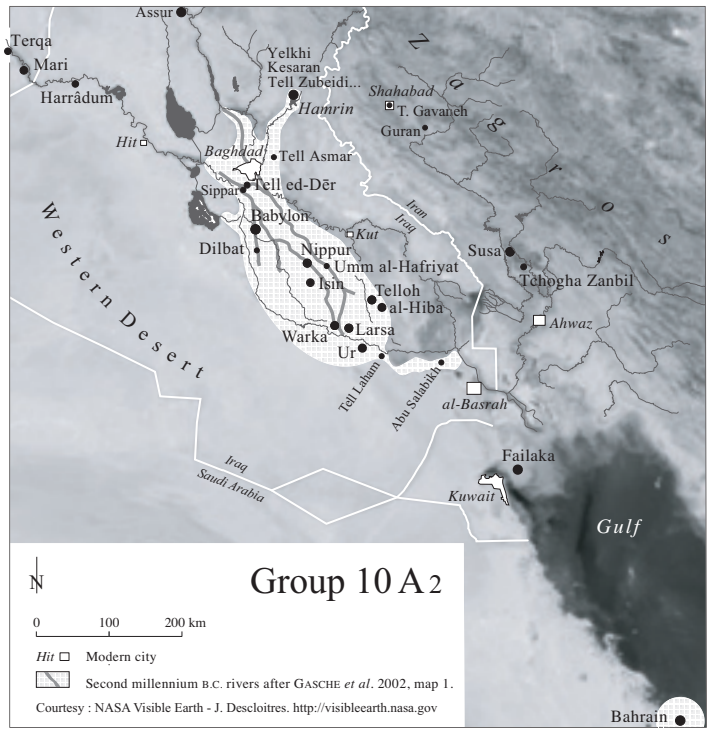
# PLATE 12

## 10 A 2




## 10 A 1

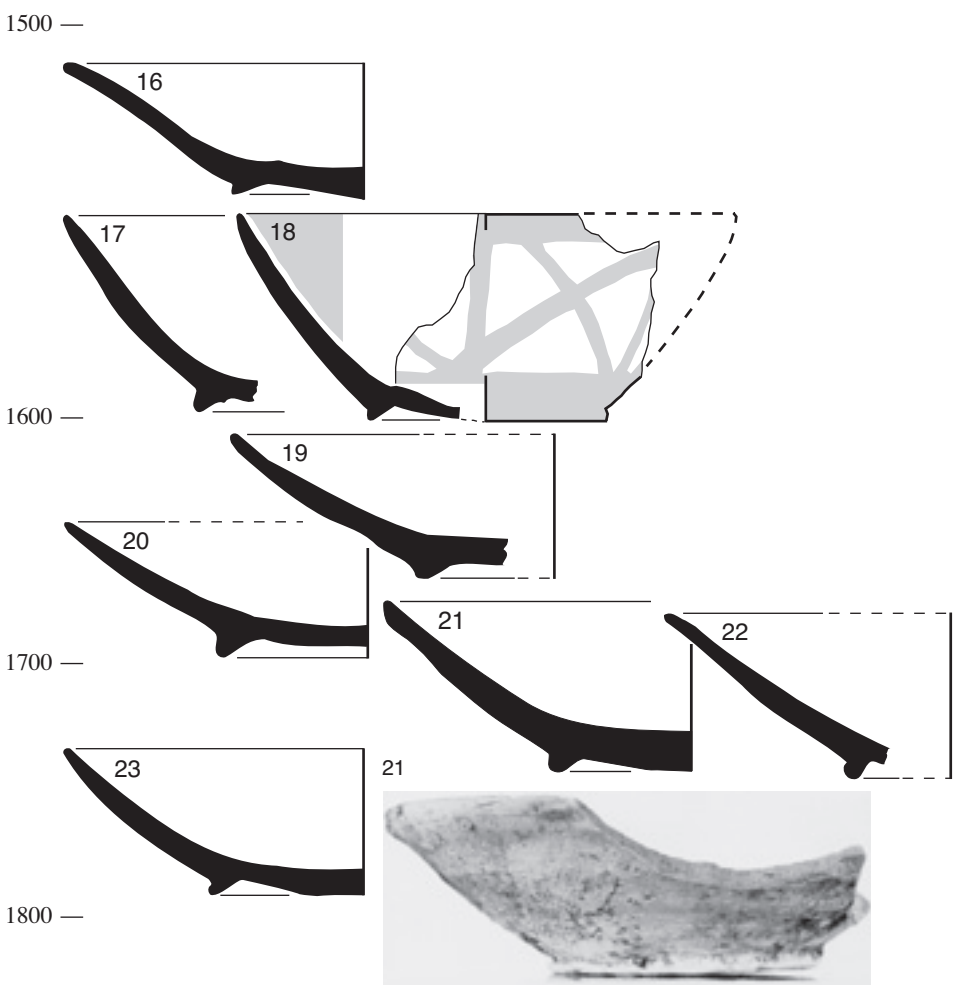
Continued from Pl. 11

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| MIDDLE EUPHRATES | | | | | | |
| 1* | M | III F2 NO54 | F | b | 10YR 8/3 | ø rim : 152. Burial III F2 NOT1. PONS 1999a, 116-117, Pl. 7 : 2 (No. 253862) = JEAN-MARIE 1999, 197-198, Pl. 258 : 11 (*tombe* 1104). |
| DIYALA | | | | | | |
| 2 | Kes | HK 17/2 | - | II | - | ø rim : 180. Burial 6. |
| 3 | Zub | 79/178 | - | I | - | ø rim : 192. *BaF* 7, 47, Pl. 114 : 144. |
| 4 | Hal | 80-3 | A | IV | - | ø rim : 152. GHASSAN 1995, Pl. 105 : 294. |
| 5 | Yel | HY 635 | B | VIc-VII | *cuoio rosato* | ø rim : 144. BERGAMINI 2002-03, Pl. 1 : 17. |
| GULF | | | | | | |
| 6 | Fai | - | - | - | - | ø rim : 184. HØJLUND 1987, fig. 307. Periods 4A-B, see p. 109. |
| 7 | Fai | - | - | - | - | ø rim : 203. HØJLUND 1987, fig. 308. Periods 4A-B, see p. 109. |
| SUSIANA | | | | | | |
| 8 | S | 640-2 | *Ville Royale* II | 10 | *beige verdâtre* | ø rim : 185. DE MIROSCHEDJI 1981, fig. 11 : 6. |
| 9 | S | 367-23 | *Ville Royale* II | 11 | *brune* | ø rim : 110. DE MIROSCHEDJI 1981, fig. 11 : 3. |
| 10 | S | 119-1 | *Ville Royale* II | 13 | *brune* | ø rim : 123. DE MIROSCHEDJI 1981, fig. 10 : 3. |
| 11 | S | GS-4294 | A | XI *ancien* | *rougeâtre* | ø rim : 153. *MDP* 47, Pl. 1 : 6. |
| 12 | S | GS-5044 | A | XII *récent* | *jaunâtre* | ø rim : 148. *MDP* 47, Pls. 1 : 10 and 57 : 1. |
| 13 | S | GS-5847 | A | XIII | *jaunâtre* | ø rim : 121. *MDP* 47, Pl. 1 : 13. |
| 14 | S | GS-7103 | B | VI | *brune* | ø rim : 140. *MDP* 47, Pl. 1 : 14. |
| 15 | S | SAc 2763 | Acro-polis | Pit 25 | *brun rouge* | ø rim : 180. *MDP* 46, Pls. 4 : 18 and 68 : 1. |

## 10 A 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 16* | D | 103978 | E | IIIb | 10YR 8/2 | ø rim : 158. Burial D.242 probably dug from IIIb. *MHEM* 1, Pls. 24 and 26 : 9. |
| 17* | D | 106872 | E | IIIe | 7.5YR 7/4 | ø rim : ± 148. |
| 18* | D | 105784 | E | V | 7.5YR 7/4 | ø rim : ± 132. Geometric design on exterior in dark paint (5YR 3/2) ; interior painted. |
| 19* | D | 100506 | B | Ia | 7.5YR 6/4 | ø rim : ± 170. |
| 20* | D | 101422 | A | Ic | 2.5YR 4/6 | ø rim : ± 160. Pit 2 dug from Ic. |
| 21* | D | 100262 | A | Ic-e | 10YR 7/3 | ø rim : 160. *TD* 1, Pl. 11 : 1 is not 100262 |
| 22* | D | 100953 | A | Ie | 5YR 6/6 | ø rim : ± 150. |
| 23* | D | 100998 | A | Ih | 10YR 8/3 | ø rim : 160. |

Continued on Pl. 13




10 cm

(Photos at various scales)

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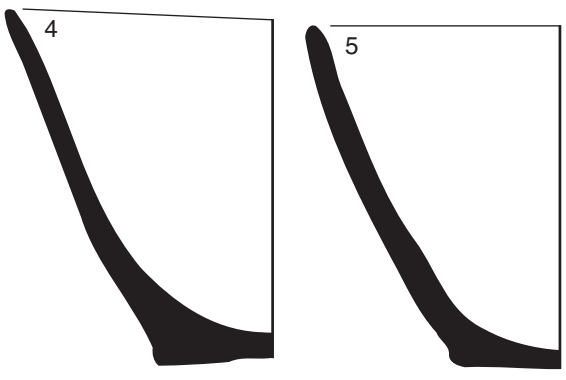
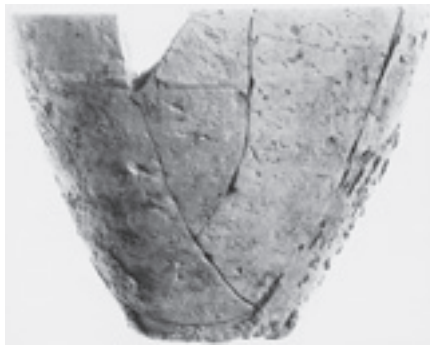
10 A 2

10 B 1

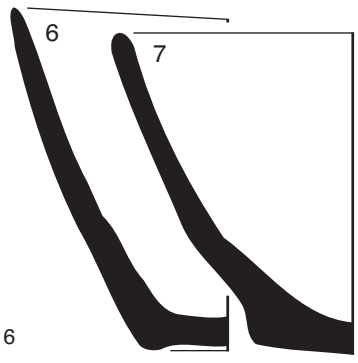
—1400

—1500

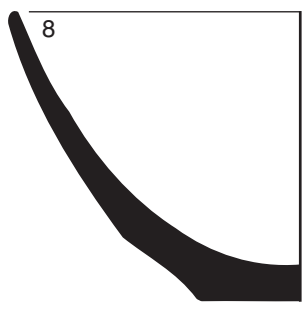


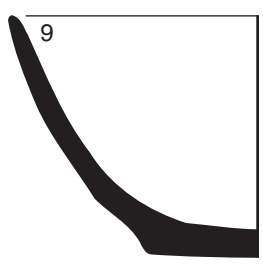



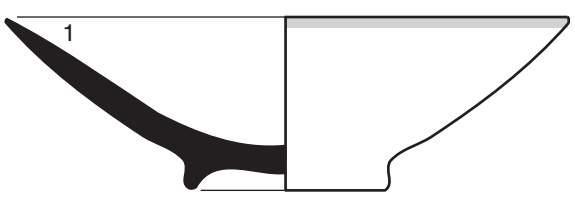
6

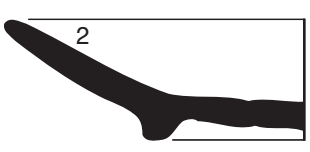


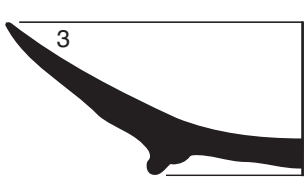

—1600




—1700

◄◄ SOUTHERN ALLUVIAL PLAIN | NORTHERN ALLUVIAL PLAIN S. A. P.

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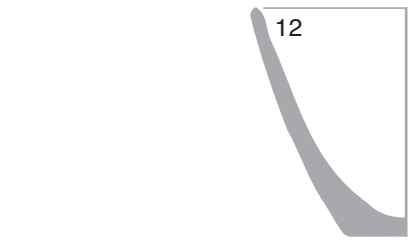
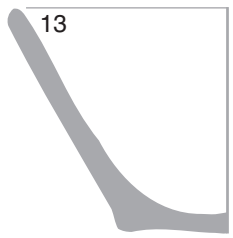
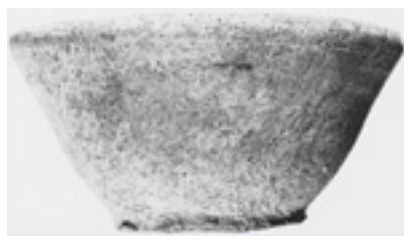
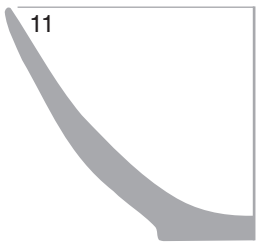
10 B 1

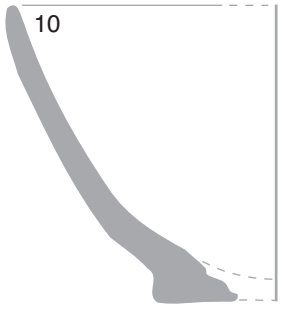


13




M. E. DIYALA SUSIANA

# PLATE 13

## 10 A 2

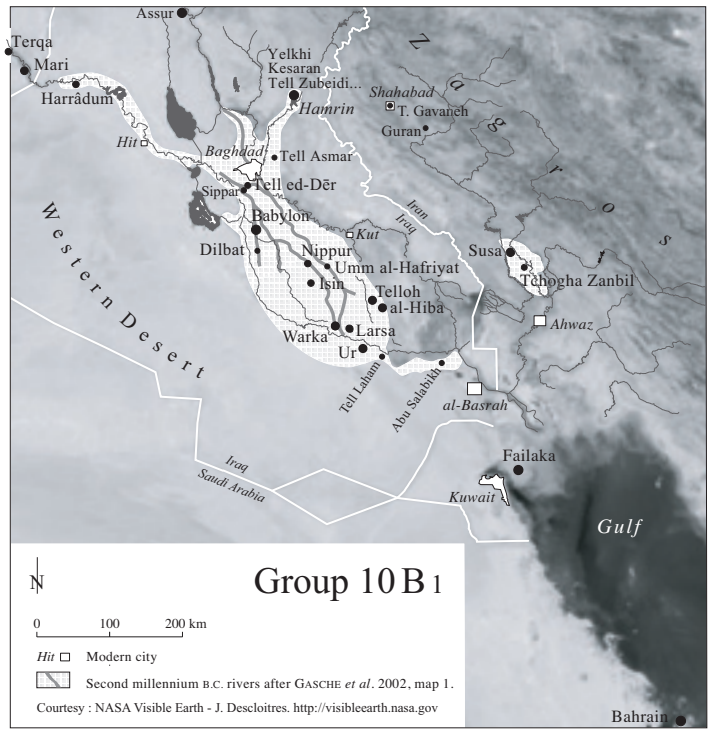
Continued from Pl. 12

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | I | 0265 | *SOA* | - | *gelb* | ø rim : 154. Dark-painted band on exterior of rim. *Isin* 2, 89, Pl. 32 : 54. |
| 2 | W | 20006a | Sînkāšid | 4 | *rot*<br>S : *hellgelb* | ø rim : 158. VAN ESS 1988a, fig. 3 : 35. |
| 3 | L | 23.4 | J VIII | 2 | - | ø rim : 156. Exc. Huot, 1970. MINSAER 1990, Pl. 6 : n. CALVET *et al.* 2003, fig. 6 : m |

## 10 B 1

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 4* | D | 104436 | E | IIId | 5YR 5/6 | ø rim : 140. Burial D.276 dug from IIId. *MHEM* 1, Pls. 15 and 26 : 22. SALLABERGER 1996, Pl. 1 : 11. |
| 5* | D | 107157 | E | IIId | 2.5YR 8/2 | ø rim : 134. *MHEM* 1, Pl. 26 : 20. |
| 6* | D | 107912 | F | Ib | 7.5YR 7/4 | ø rim : 116. *NAPR* 3, Pl. 6 : 3. |
| 7* | D | 107910 | F | Ib | 7.5YR 7/4 | ø rim : 125. *NAPR* 3, Pl. 6 : 2. |
| 8* | D | 100657 | B | Ib-d | 7.5YR 6/3 | ø rim : 150. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 9 | N | 12 N 776 | WB | IV 5 | buff<br>S : cream | ø rim : 132. |
| MIDDLE EUPHRATES | | | | | | |
| 10 | Din | V 429 | *Bât.* 10 | 3C | *beige* | ø rim : ± 154. *Haradum* 1, fig. 113 : 2. |
| DIYALA | | | | | | |
| 11 | Yel | HY 196/5 | B | IIIa-b[1)] | *rossastro* | ø rim : 130. Burial 15 dug from IIIa-b. GABUTTI 2002-03, Pl. 29 : 13. |
| SUSIANA | | | | | | |
| 12 | S | GS-4592 | A | XI *ancien* | *rougeâtre* | ø rim : 83. *MDP* 47, Pl. 1 : 9. |
| 13 | S | GS-5069a | A | XII *ancien* | *jaunâtre* | ø rim : 112. *MDP* 47, Pls. 1 : 11 and 57 : 2. |

1) GABUTTI 2002-03 assigns Burial 15 to both Level IIIa-b (Pl. 29 : 13) and Level IIIa (Pl. 71 : 3).




10 cm

(Photos at various scales)

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10 B 2

—1500

1

2

3

4

5

8

9

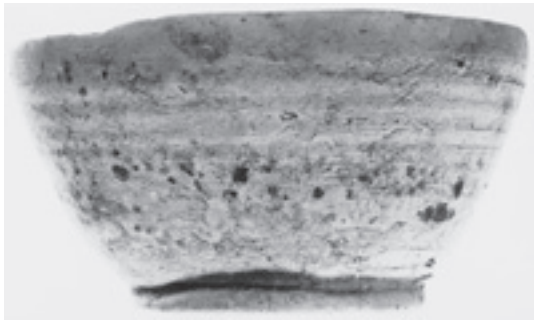
11

—1600

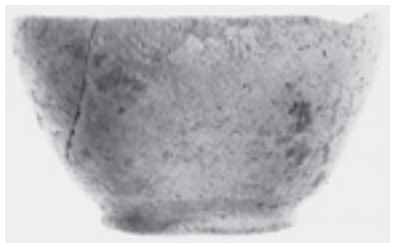
10

6

7



5



10

—1700

N. A. P. S. A. P. M. E. DIYALA

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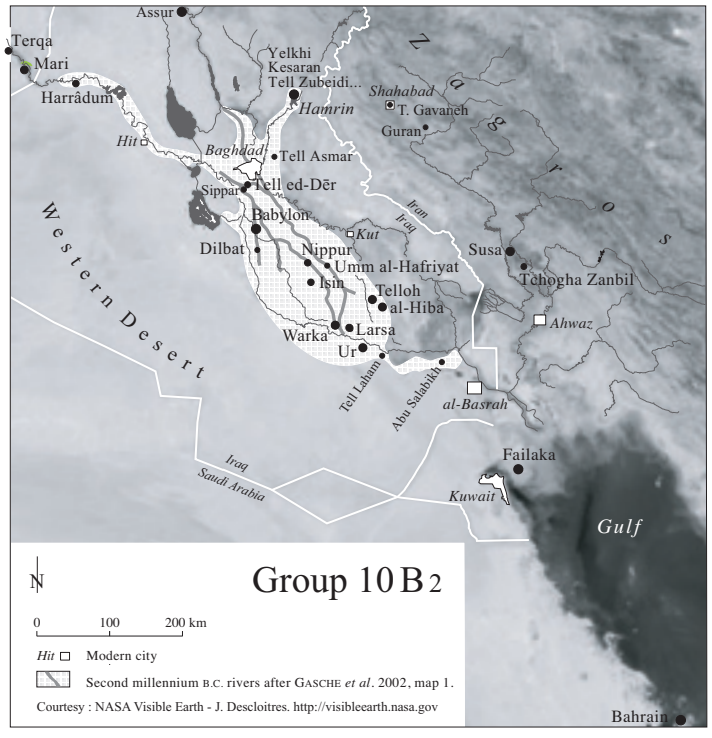
# PLATE 14

## 10 B 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 103993 | E | IIIb | 7.5YR 6/4 | ø rim : 142. *MHEM* 1, Pl. 26 : 13. |
| 2* | D | 105739 | E | IIId | 7.5YR 7/6 | ø rim : 125. *MHEM* 1, Pl. 27 : 17. SALLABERGER 1996, Pl. 1 : 12. |
| 3* | D | 106884 | E | IIIe | 2.5Y 7/4 | ø rim : 144. |
| 4* | D | 100931 | A | Ia | 5YR 6/4 | ø rim : 140. |
| 5* | D | 100988 | A | Ic | 7.5YR 6/4 | ø rim : 147. Burial D.16 dug from Ic. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 6 | I | IB 1342 | *WA* | 6,72m | *rotbraun* | ø rim : 130. *Isin* 2, 89, Pl. 32 : 53. Geometric design on exterior with broad band over rim in dark paint. |
| 7 | W | 20124,3 | Sînkāšid | 4 | *rot* S : *hellgelb* | ø rim : 96. VAN ESS 1988a, fig. 4 : 53. |
| MIDDLE EUPHRATES | | | | | | |
| 8 | Din | 57/117 | *Bât*. 3 | 3A | *beige rosé* | ø rim : 132. *Haradum* 1, fig. 114 : 10. |
| 9* | Din | V 248 | *Bât*. 2 | $3B_1$ | 5YR 7/3 | ø rim : 162. *Haradum* 1, fig. 114 : 2. Redrawn. |
| 10* | Din | V 441 | *Bât*. 10 | 3C | 7.5YR 8/4 | ø rim : 106. *Haradum* 1, fig. 113 : 5. Redrawn. |
| DIYALA | | | | | | |
| 11 | Yel | y 412 | B | IIIb | *rossastro* | ø rim : 120. GABUTTI 2002-03, Pl. 29 : 9. |




10 cm

(Photos at various scales)

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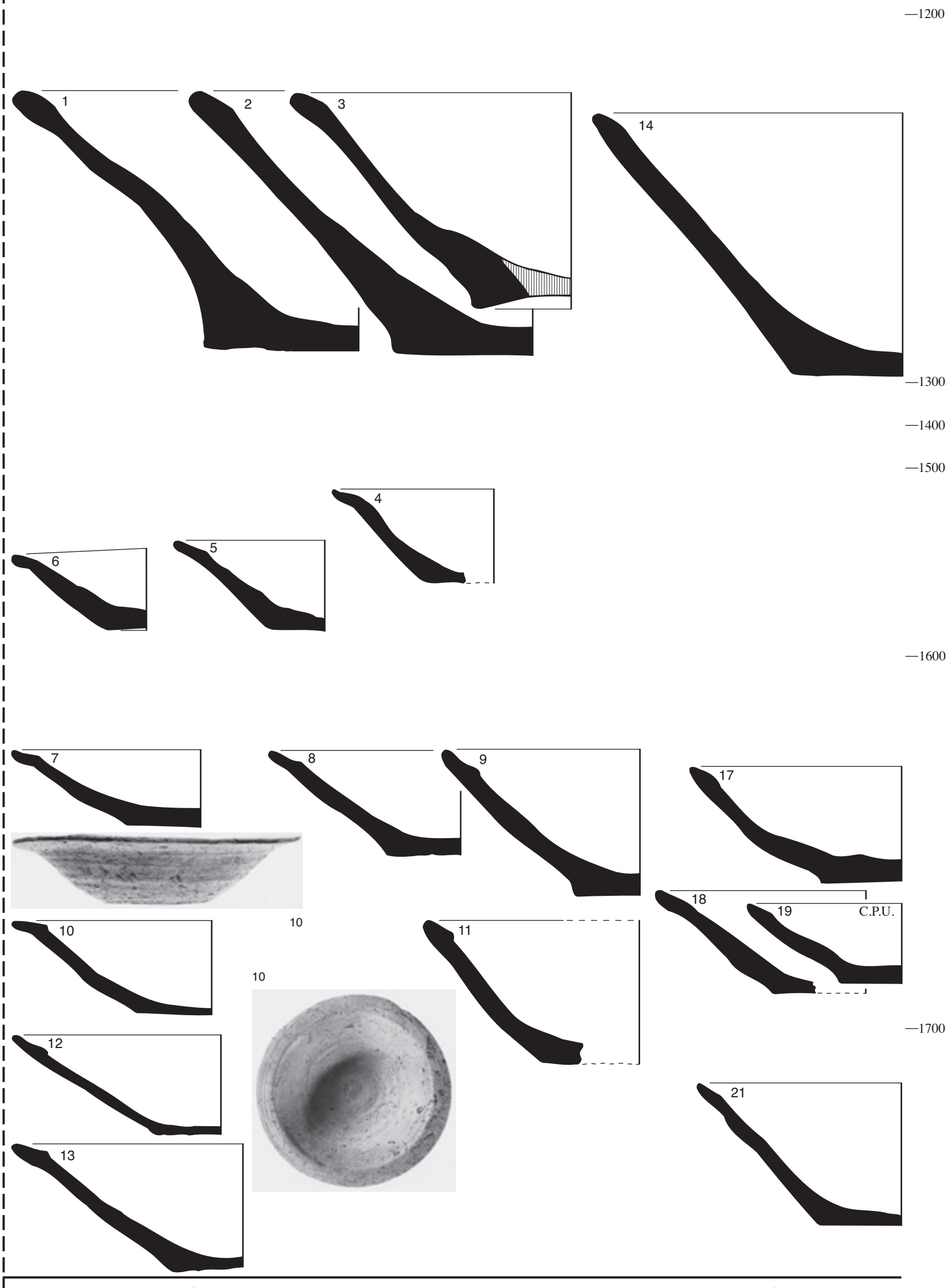
10 C 1




—1200
—1300
—1400
—1500
—1600
—1700
—1800

NORTHERN ALLUVIAL PLAIN S. A. P.

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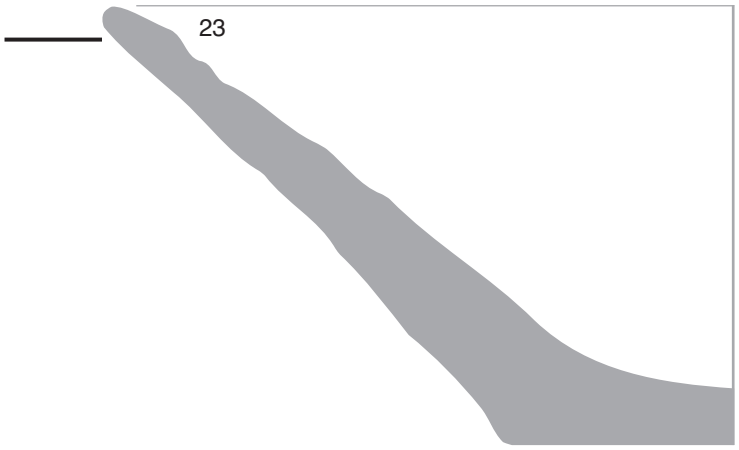
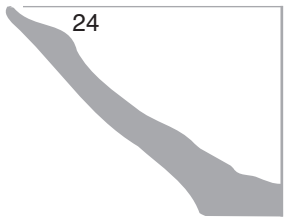
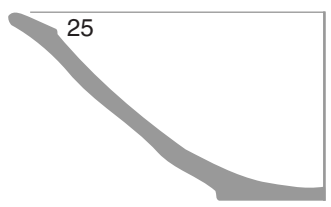
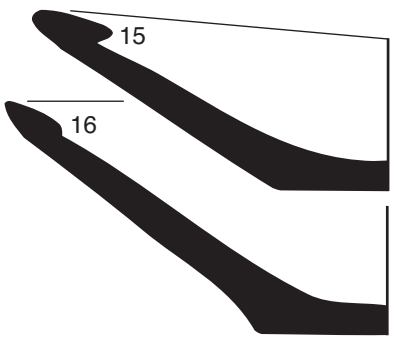
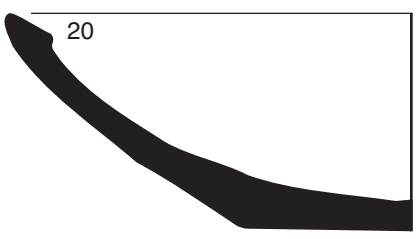
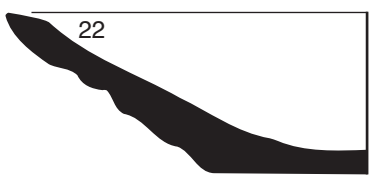



S. A. P. DIYALA SUSIANA

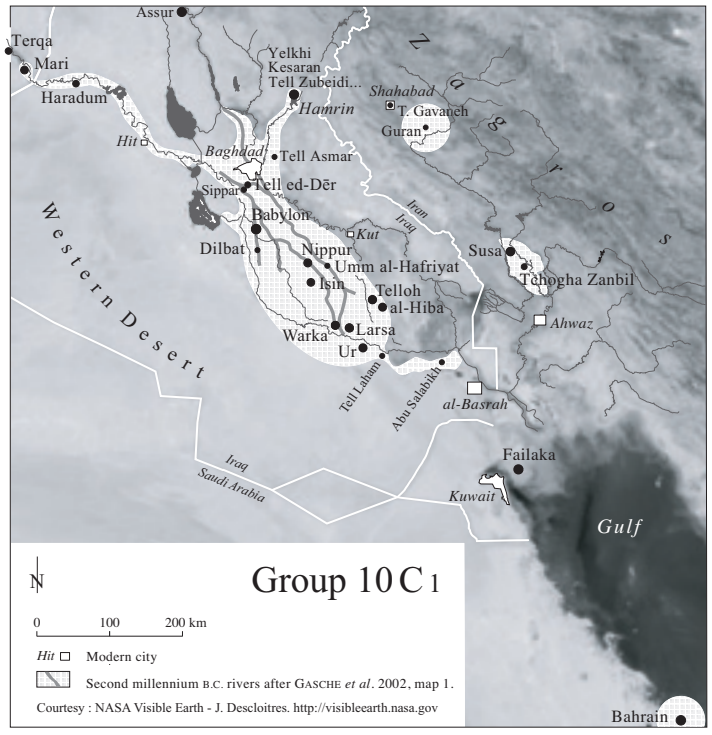
# PLATE 15

## 10 C 1

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 103098 | E | 0 | 2.5Y 7/2 | ø rim : 320. Pit 1 dug from Ensemble 0. |
| 2* | D | 103835 | E | 0 | 10YR 7/3 | ø rim : 320. Pit 1 dug from Ensemble 0. |
| 3* | D | 107579 | E3 | 0 | 7.5YR 7/4 | ø rim : 262. Filled-in base. Pit 1 dug from Ensemble 0. *NAPR* 6, Pl. 9 : 10. |
| 4* | D | 103213 | E | IIIc | 7.5YR 6/4 | ø rim : 149. Pit 20 dug from IIId. |
| 5* | D | 106890 | E | IIIe | 5YR 6/4 | ø rim : 140. |
| 6* | D | 106889 | E | IIIe | 5YR 6/4 | ø rim : 129. |
| 7* | D | 100400 | A | Ic[1)] | 5Y 7/3 | ø rim : 177. *TD* 1, Pl. 13 : 1. |
| 8* | D | 101423 | A | Ic | 2.5Y 7/4 | ø rim : 180. Pit 2 dug from Ic. |
| 9* | D | 101717 | A | Ic | 2.5YR 6/6 | ø rim : 185. |
| 10* | D | 101343 | A | Ie | 2.5Y 7/4 | ø rim : 185. Burial D.31 probably dug from Ie. |
| 11* | D | 100633 | B | A 12 | 10YR 7/3<br>S : 5Y 7/3 | ø rim : ± 170. |
| 12 | D | 101926 | A | Ig | 2.5YR 5/4 | ø rim : 198. Burial D.46 dug from Ig. |
| 13* | D | 102983 | A | Ii | 7.5YR 6/4 | ø rim : 215. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 14 | N | D 58 | WC-1 | III | - | ø rim : 292. *OIP* 111, Pl. 75 : h |
| 15 | I | 0249 | *NOA* I | 7,05m | 10YR 8/3<br>S : 10YR 8/2 | ø rim : 186. |
| 16 | I | 0252 | *NOA* I | 6,80m | 10YR 8/4 | ø rim : 200. |
| 17 | L | 59.149 | *Mais*. 59 | *Sols* | *grise* | ø rim : 198. Exc. Huot. CALVET 2003, fig. 63. |
| 18 | L | 27.79 | *Mais*. 27 | *Rempl.* | *brune* | ø rim : 196. Exc. Huot. CALVET 2003, fig. 47. |
| 19 | W | 20285,2 | Sînkāšid | 0 | - | ø rim : 142. VAN ESS 1988a, fig. 3 : 30. |
| 20 | H | 1 HP 597 | B | - | - | ø rim : 215. |
| 21 | N | 12 N 642 | WA | V | red-buff | ø rim : 190. |
| 22 | N | C 1107 | WA | V | reddish | ø rim : 190. |
| DIYALA | | | | | | |
| 23 | Zub | - | - | I | - | ø rim : 334. *BaF* 7, Pl. 114 : 148. |
| 24 | Yel | y 413 | B | IIIa | *cuoio rosato* | ø rim : 148. GABUTTI 2002-03, Pl. 27 : 21. |
| SUSIANA | | | | | | |
| 25 | S | GS-6153 | A | XIV | *jaunâtre* | ø rim : 168. *MDP* 47, Pl. 1 : 22. |

1) See *TD* 2, 38 for the stratigraphical correction.

C.P.U. = Chronological Position Uncertain




10 cm

(Photos at various scales)

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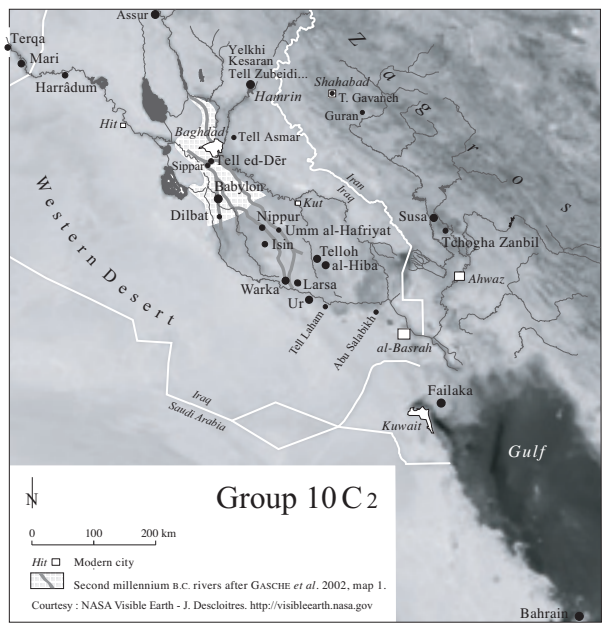
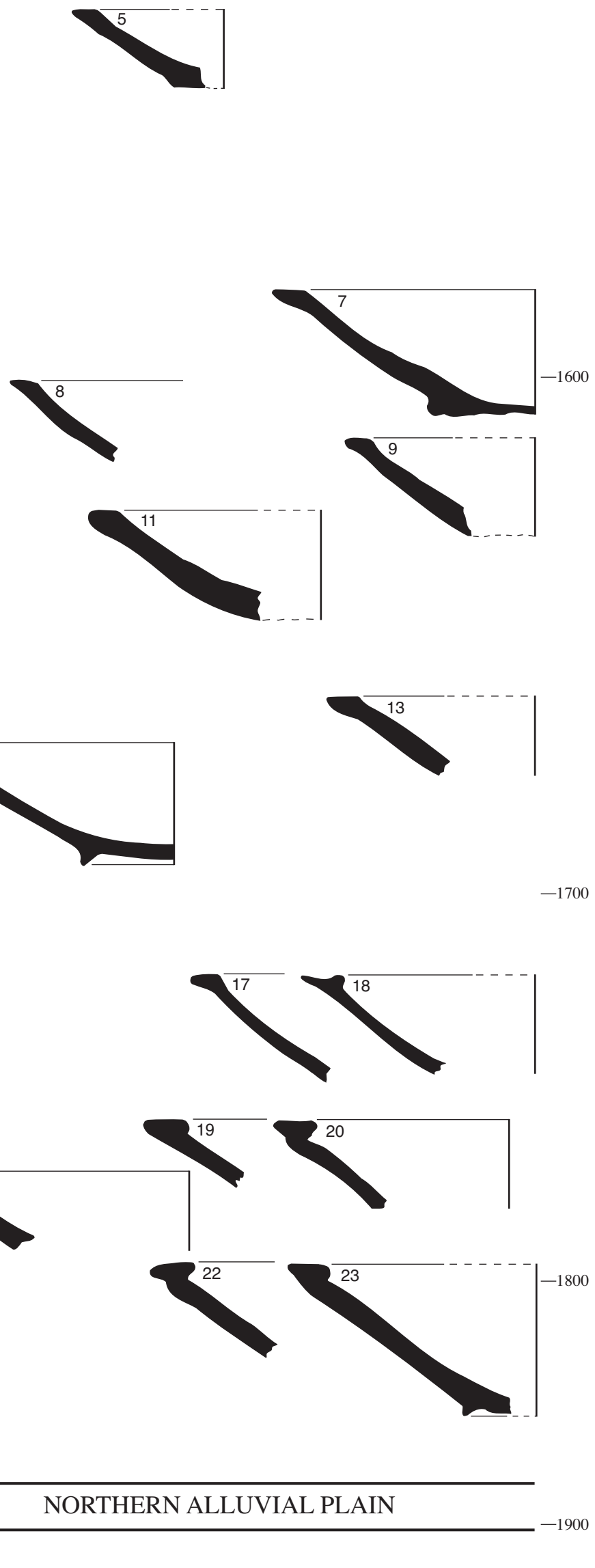
## 10 C 2




## 10 D 1 & 2




NORTHERN ALLUVIAL PLAIN

NORTHERN ALLUVIAL PLAIN

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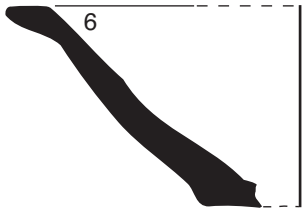


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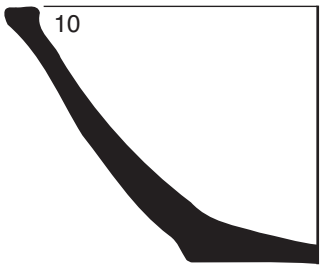
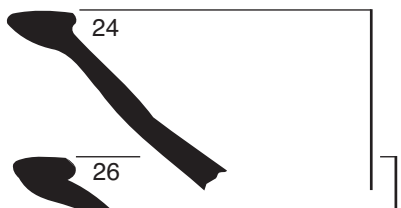
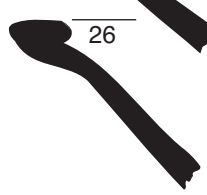
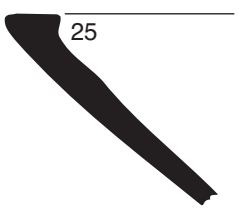




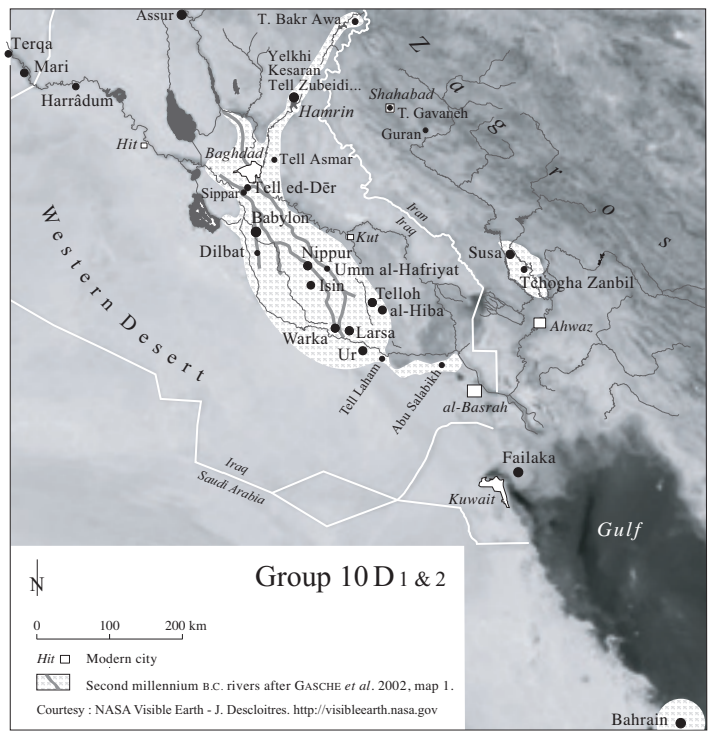

## 10 C 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | D | 101342 | A | Ie | 5YR 7/6 | ø rim : 212. Burial D.31 probably dug from Ie. |
| 2* | D | 101476 | A | Ih | 5YR 7/4 | ø rim : 190. |
| 3* | D | 101786 | A | Ii | 5YR 5/4 | ø rim : ± 250. |
| 4* | D | 102614 | A | IIe | 5YR 6/6 | ø rim : 205. *TD* 4, Pl. 14 : 6. |

## 10 D 1 & 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 5* | D | 109490 | E | IIId | 10YR 8/3 | ø rim : ± 120. |
| 6* | D | 109488 | E | IIId-f | 7.5YR 6/4 | ø rim : ± 155. |
| 7* | D | 101265 | A | 0 | 5YR 5/6 | ø rim : 200. |
| 8* | D | 100043 | A | Ia | 5YR 6/4 | ø rim : -. |
| 9* | D | 101097 | A | Ia-c | 7.5YR 6/4 | ø rim : ± 140. |
| 10 | D | 100989 | A | Ic | 5YR 6/4 | ø rim : 165. *TD* 2, Pl. 18 : 4. |
| 11* | D | 102053 | B | I | 7.5YR 6/4 | ø rim : ± 180. |
| 12* | D | 100860 | A | Id | 10YR 8/4 | ø rim : -. |
| 13* | D | 100862 | A | Id | 7.5YR 7/4 | ø rim : ± 160. |
| 14* | D | 101983 | A | Ie | 7.5YR 6/4 | ø rim : 198. Burial D.123 dug from Ie. |
| 15* | D | 100946 | A | Ie | 5Y 7/3 | ø rim : ± 200. |
| 16* | D | 102622 | A | Ig | 5Y 6/6 | ø rim : 190. |
| 17* | D | 101600 | A | Ii | 5YR 6/4 | ø rim : ± 170. |
| 18* | D | 101486 | A | Ii | 7.5YR 7/4 | ø rim : ± 180. |
| 19* | D | 102349 | A | Ik | 5YR 7/6 | ø rim : 200. |
| 20* | D | 102798 | A | Ik | 7.5YR 6/4 | ø rim : 180. |
| 21* | D | 103532 | A | IIa | 7.5YR 6/4 | ø rim : 210. *TD* 4, Pl. 18 : 5. |
| 22* | D | 102992 | A | IIb | 10YR 7/2 | ø rim : -. |
| 23* | D | 109498 | A | IIb | 7.5YR 6/4 | ø rim : ± 190. |
| 24* | D | 102978 | A | IIb | 7.5YR 6/4 | ø rim : 190. |
| 25* | D | 109492 | A | IIc | 10YR 8/3 | ø rim : -. Pit 10 dug from IIc. |
| 26* | D | 102570 | A | IIe | 7.5YR 6/4 | ø rim : 200. Pit 9 dug from IIe. |

Continued on Pl. 17




10 cm

(Photos at various scales)

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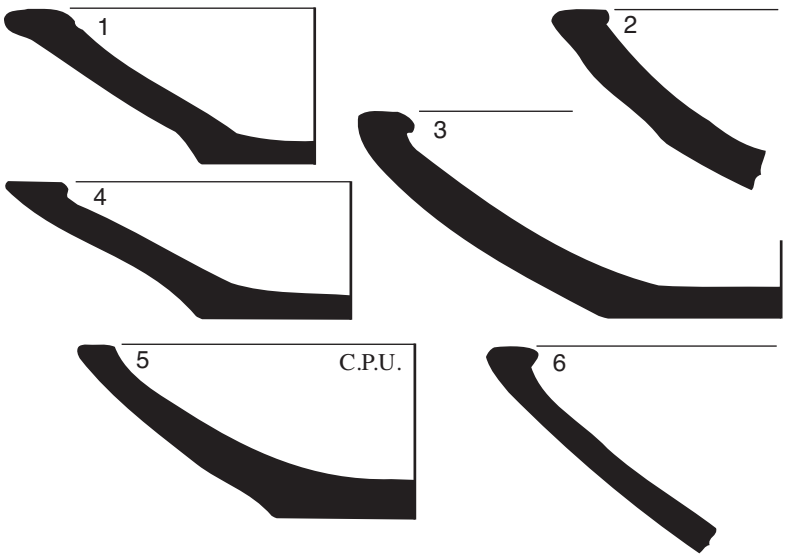
10 D 1 & 2

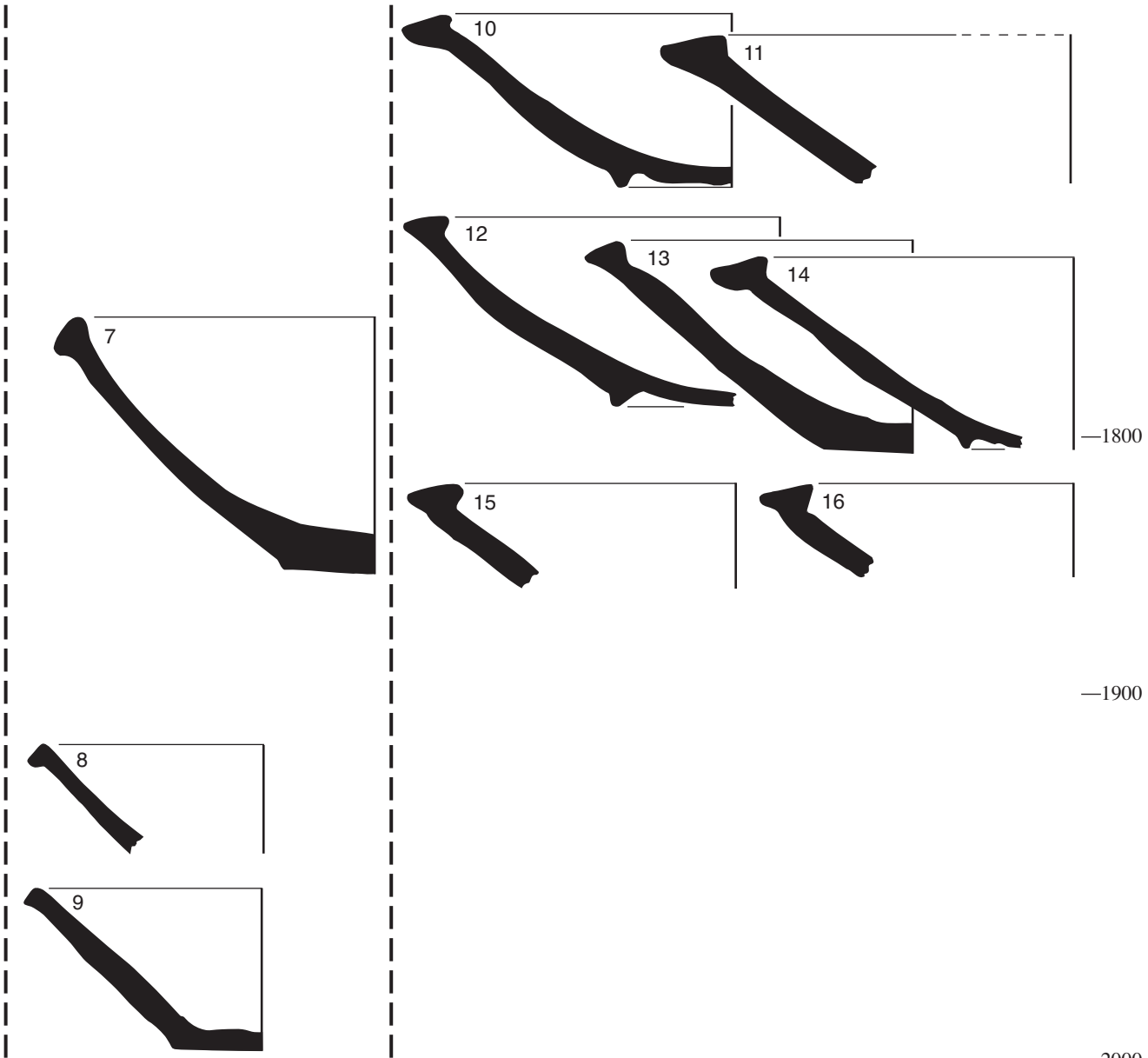
10 E 1

10 F 1 & 2

—1600




—1700




—1800

—1900

—2000

S. A. P.

S. A. P.

NORTHERN ALLUVIAL PLAIN

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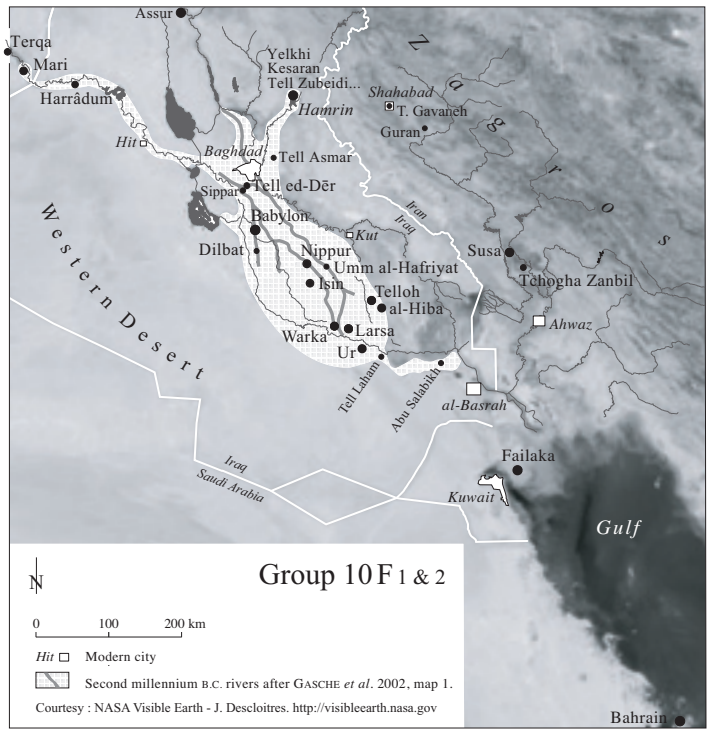
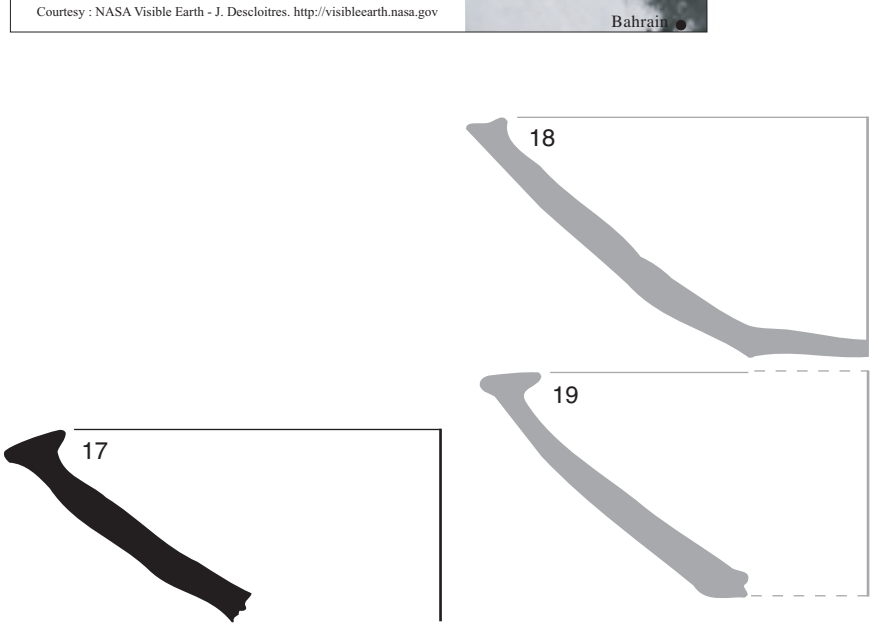
# PLATE 17

## 10 F 1 & 2




## 10 D 1 & 2

Continued from Pl. 16

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | I | 0251 | *NOA* III | 6,92m | 7.5YR 7/6<br>S : 7.5YR 8/4 | ø rim : 164. |
| 2 | L | 27.43 | *Mais.* 27 | *Rempl.*[1)] | *jaune* | ø rim : ± 208. Exc. Huot. CALVET 2003, fig. 54. |
| 3 | I | 0248 | *NOA* I | 6,80m | 10YR 8/3<br>S : 2.5Y 8/2 | ø rim : 222. |
| 4 | I | IB 1451 | *NOA* I | 6,74m | 7.5YR 8/6<br>S : 10YR 8/3 | ø rim : 182. Burial 114. We disagree with the Kassite dating of this vessel suggested in *Isin* 3, 19. |
| 5 | W | 20025 | Sînkāšid | 5 | *rot* | ø rim : 178. VAN ESS 1988a, fig. 3 : 26. |
| 6 | N | B 1026 | WB | IV 1 | pink<br>S : buff | ø rim : -. |

## 10 E 1

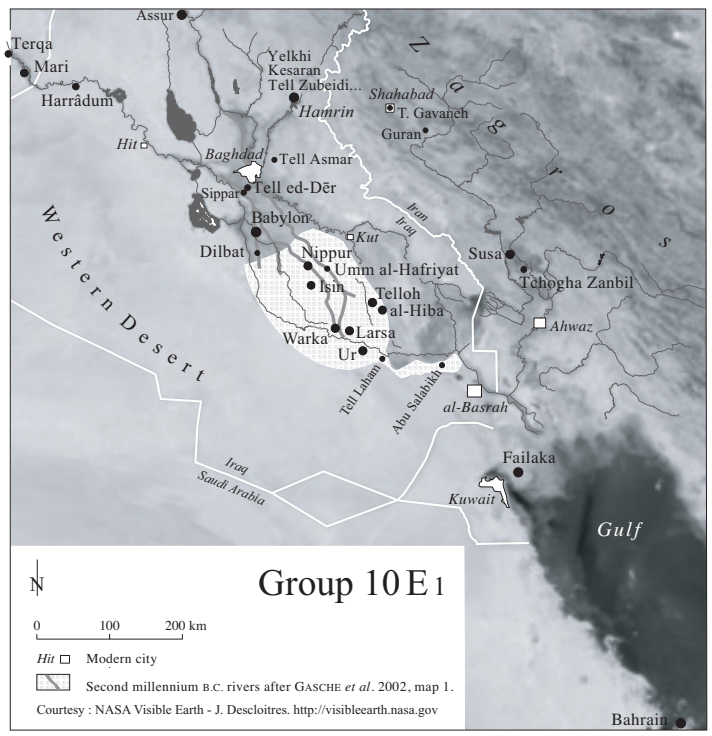
| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 7 | U | 301 | A | II | pink | ø rim : 196. |
| 8 | N | H 771 : 3 | WF | VIII | buff | ø rim : 146. *OIP* 129, Pl. 85 : 7. |
| 9 | N | 12 : 1 | WF | X | buff | ø rim : 148. *OIP* 129, Pl. 85 : 4. |

## 10 F 1 & 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 10* | D | 102443 | A | Ii | 10YR 7/3 | ø rim : 200. From Well 2. |
| 11* | D | 101525 | A | Ii | 7.5YR 7/4 | ø rim : ± 250. |
| 12* | D | 103757 | A | IIa | 2.5Y 7/2 | ø rim : 230. |
| 13* | D | 102668 | A | IIa | 7.5YR 6/4 | ø rim : 200. *TD* 4, Pl. 18 : 7. |
| 14 | D | 102725 | A | IIa | 7.5YR 6/4 | ø rim : 185. |
| 15* | D | 102516 | A | IIc | 5YR 6/6 | ø rim : 200. *TD* 4, Pl. 15 : 5. |
| 16* | D | 102835 | A | IIc | 7.5YR 6/4 | ø rim : 190. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 17 | H | 1 HP 554 | B | - | - | ø rim : 228. |
| DIYALA | | | | | | |
| 18 | Yel | y 221 | B | Vb | *giallo-verdastro* | ø rim : 212. GABUTTI 2002-03, Pl. 27 : 23. |
| 19 | Yel | 32 | B | Vc | - | ø rim : ± 208. GABUTTI 2002-03, Pl. 27 : 24. |

1) See CALVET 2003, 150 for stratigraphical details.

C.P.U. = Chronological Position Uncertain




10 cm

(Photos at various scales)

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10 G

10 H 2

—1600

10

11

11

—1700

1

6

7

8

2

3

4

5

9

—1800

N. A. P.

S. A. P.

N. A. P.

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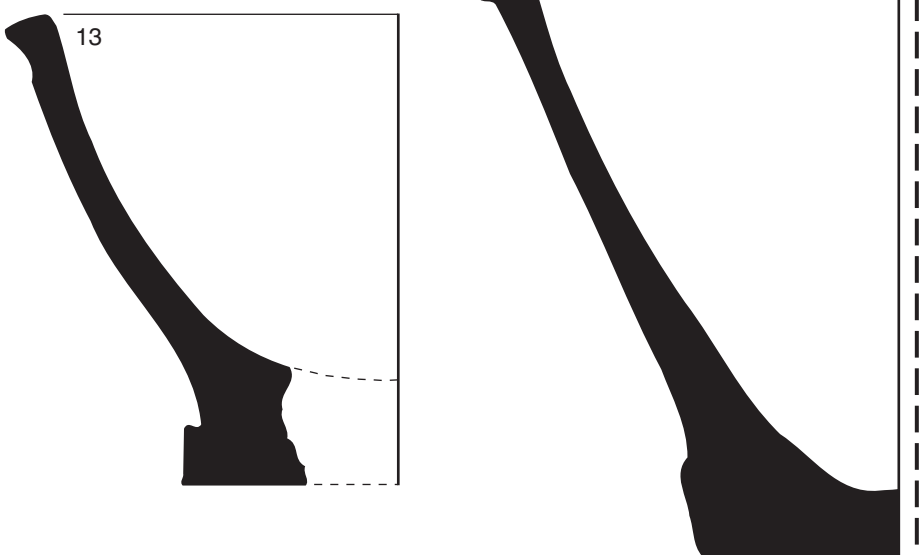
# PLATE 18

## 10 H 2



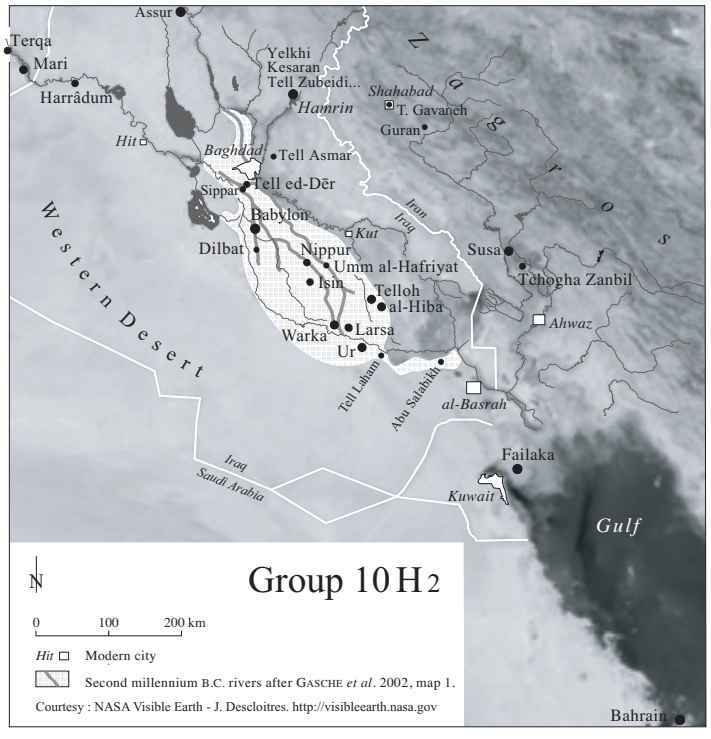

## 10 G

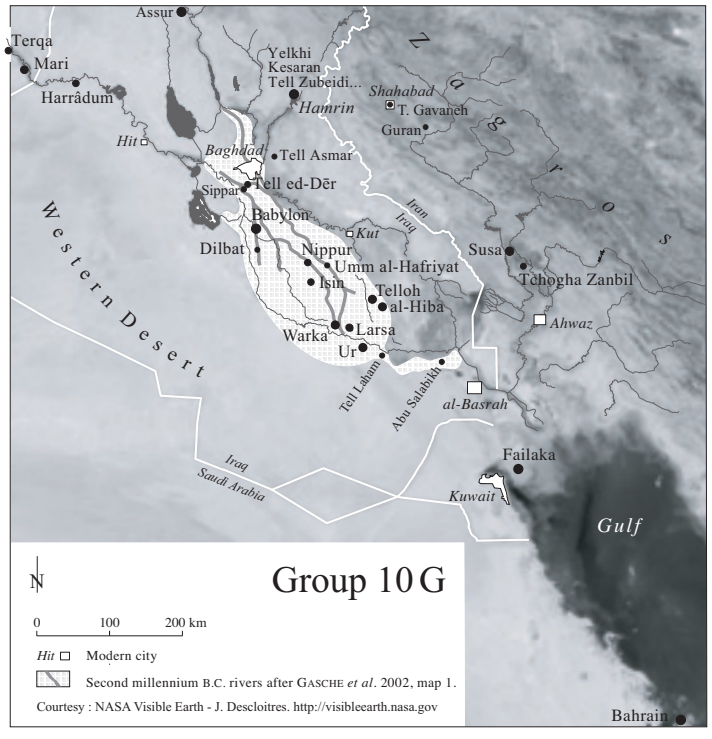
| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 102847 | A | Ig | 2.5Y 6/2 | ø rim : 290. Pit 20 dug from Ig. |
| 2* | D | 102421 | A | Ik | 7.5YR 7/4 | ø rim : 190. |
| 3* | D | 102743 | A | IIa | 7.5YR 7/4 | ø rim : -. |
| 4* | D | 103505 | A | IIb | 7.5YR 6/4 | ø rim : 190. |
| 5* | D | 103562 | A | IIc | 10YR 6/4 | ø rim : ± 230. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 6 | N | B 583 | WA | V | buff | ø rim : ± 210. |
| 7 | N | B 583 | WA | V | buff | ø rim : ± 220. |
| 8 | N | C 233 | WA | V | cream | ø rim : ± 190. |
| 9 | U | 227 | A | II | pink | ø rim : 220. |

## 10 H 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 10 | D | 100049 | A | Ia | 2.5Y 7/2 | ø rim : 240. *TD* 1, Pl. 14 : 2. |
| 11* | D | 100352 | A | Ic[1)] | 5Y 7/3 | ø rim : 190. *TD* 1, Pl. 14 : 1. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 12 | N | 3P 167 | TA | X | buff | ø rim : 222. *OIP* 78, Pl. 93 : 12. Addl. ex. in TA XII-XI. |
| 13 | N | 3P 394 | TA | X | buff | ø rim : 208. *OIP* 78, Pl. 93 : 13. Addl. ex. in TA XII-XI. |

1) See *TD* 2, 38 for the stratigraphical correction.




10 cm

(Photos at various scales)

SOUTHERN ALLUVIAL PLAIN

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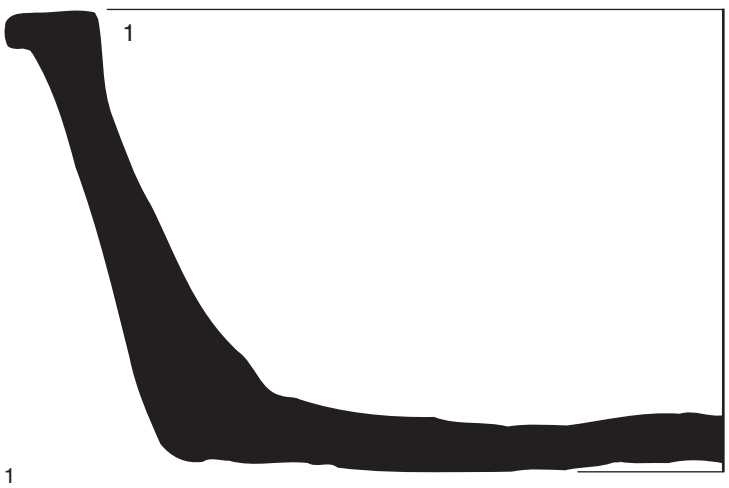
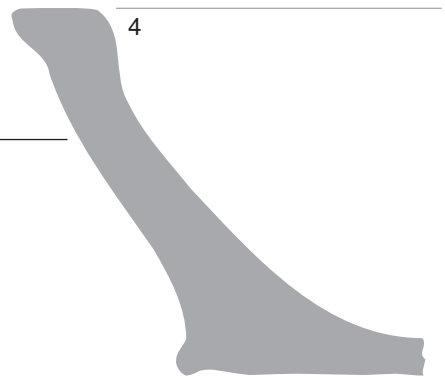
—1600



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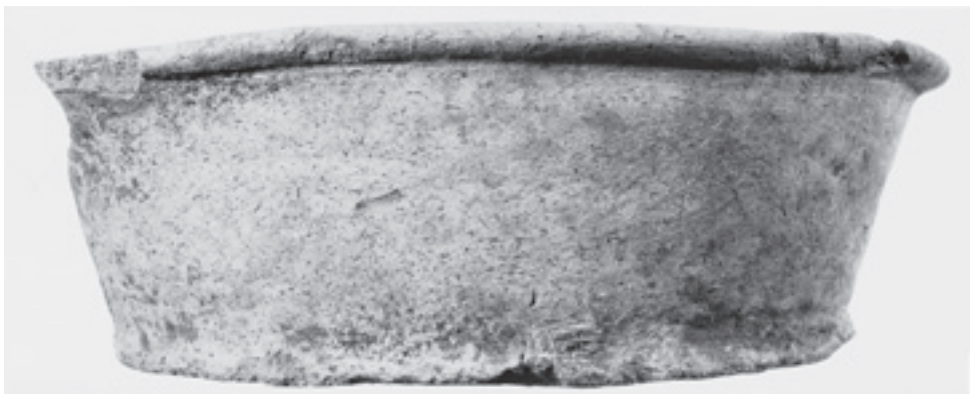
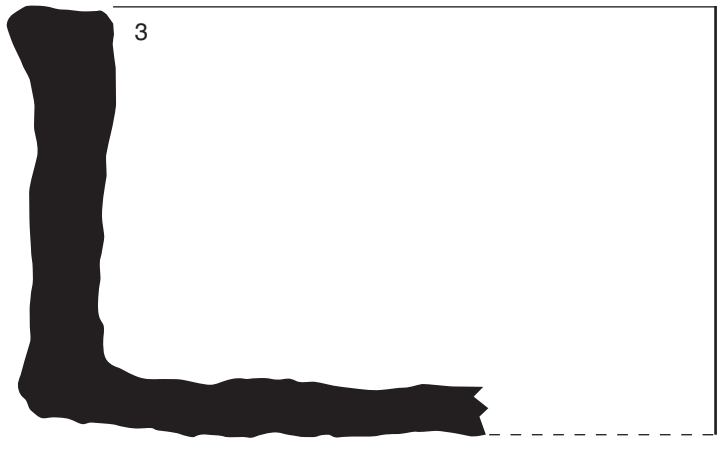


—1700

—1800




—1900

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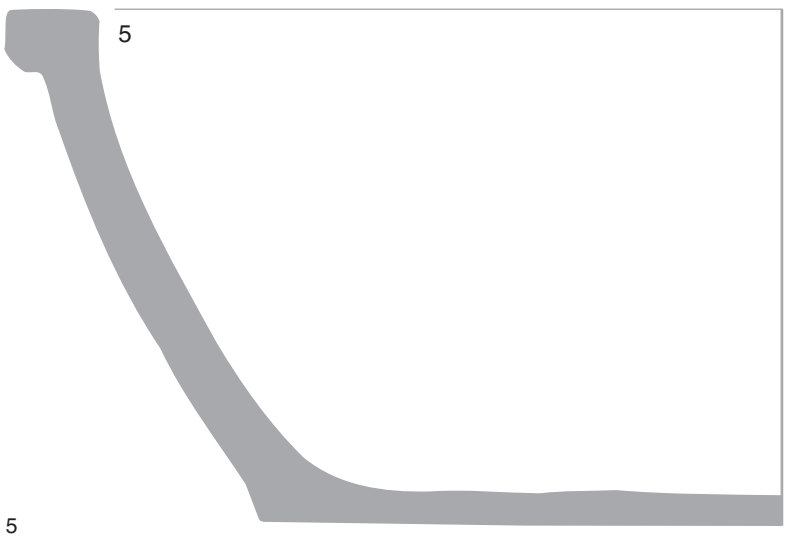
10 I 1

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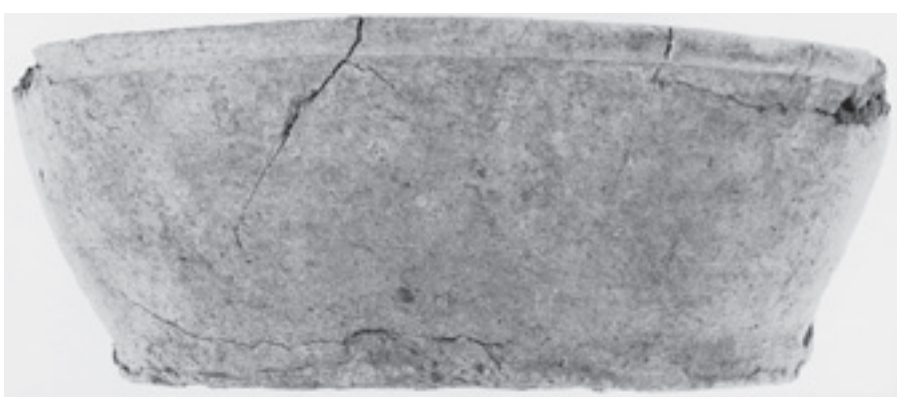
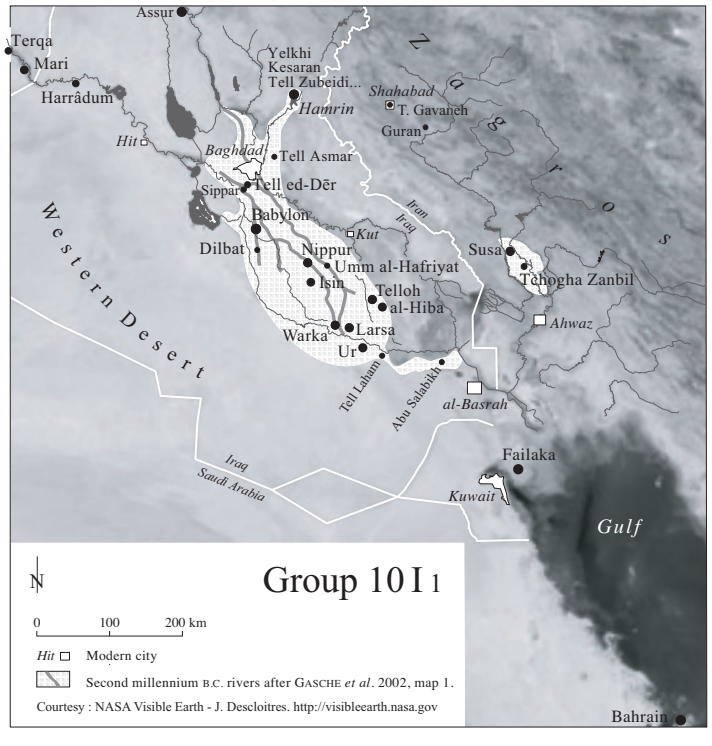


SUSIANA

# PLATE 19

## 10 I 1

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 101718 | A | Ic | 5Y 7/3 | ø rim : 375. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 2 | N | C 1472 | WB | IV 2 | - | ø rim : -. |
| 3 | N | H 690 : 1 | WF | VI | buff | ø rim : 375. *OIP* 129, Pl. 81 : 5. |
| DIYALA | | | | | | |
| 4 | Yel | y 103 | - | IVa | *rossastro* | ø rim : ± 380. GABUTTI 2002-03, Pl. 40 : 1. |
| SUSIANA | | | | | | |
| 5 | S | GS-5981b | A | XIV | *brune* | ø rim : 412. Burial S.144 dug from XIV. *MDP* 47, Pls. 2 : 5 and 57 : 3. |




10 cm

(Photos at various scales)

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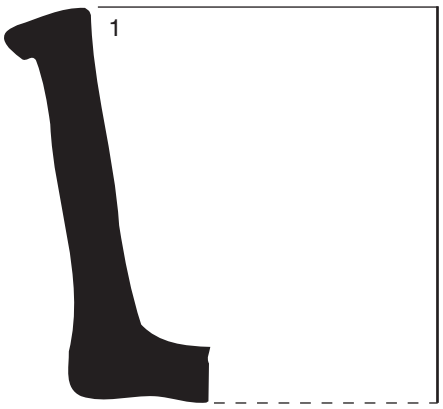
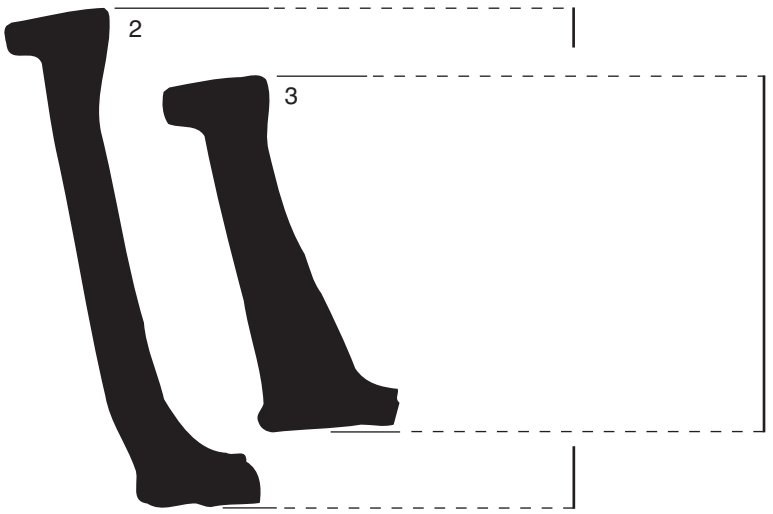
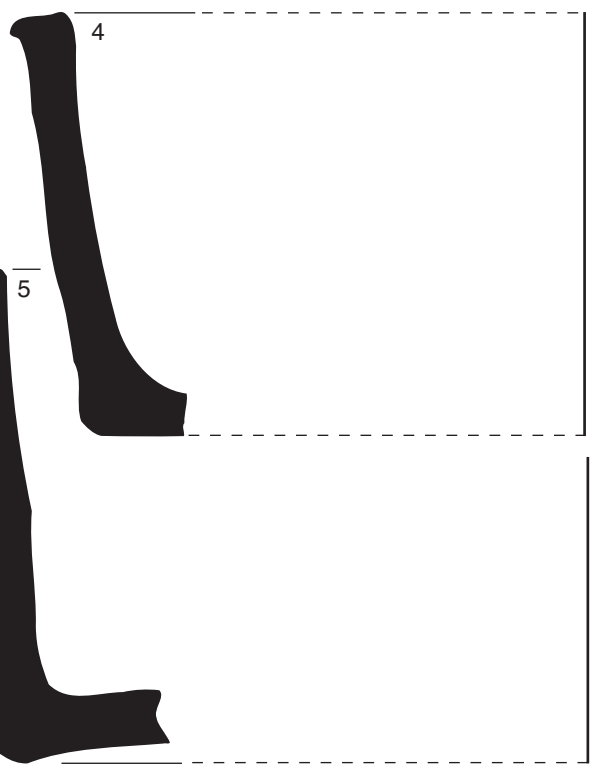
—1500

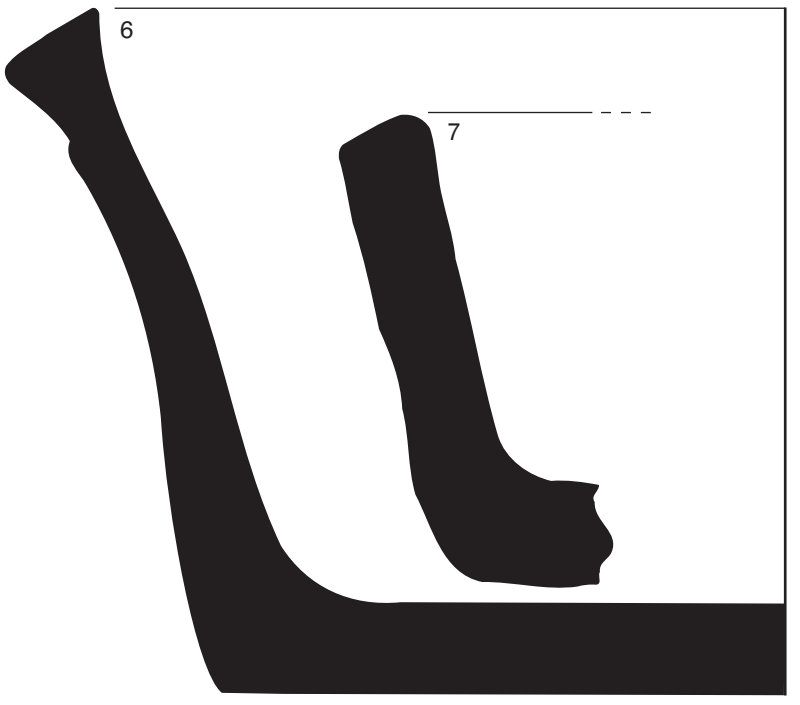
10 J 1

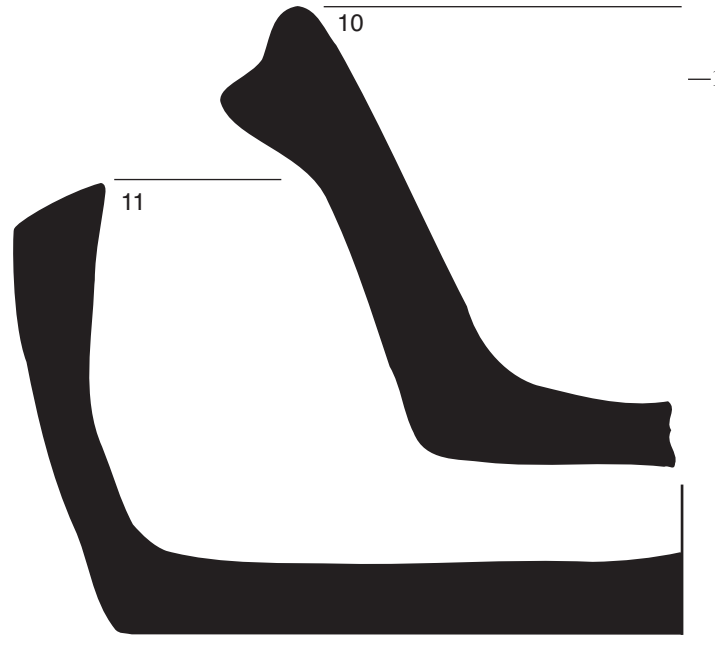
—1600




—1700

NORTHERN ALLUVIAL PLAIN

SOUTHERN ALLUVIAL PLAIN

—1900

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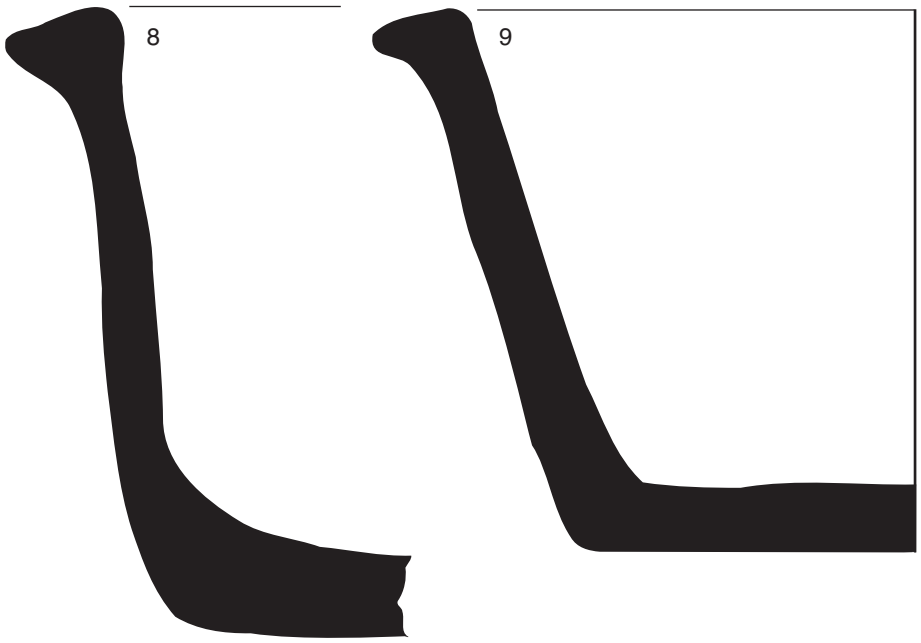
# PLATE 20

## 10 J 1

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 104049 | E | IIIc | 7.5YR 7/4 | ø rim : 228. |
| 2* | D | 100170 | A | Ia | 2.5Y 7/2 | ø rim : ± 255. *TD* 1, Pl. 14 : 4. |
| 3* | D | 100254 | A | Ia | 2.5Y 7/2 | ø rim : ± 320. |
| 4* | D | 100342 | A | Ic[1)] | 10YR 7/3 | ø rim : ± 300. *TD* 1, Pl. 14 : 3. |
| 5* | D | 101102 | A | Ie | 5Y 6/4 | ø rim : ± 360. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 6 | I | 0260 | *SOA* | 5,70m | - | ø rim : 412. |
| 7 | N | B 905 | WB | IV 2 | buff | ø rim : ± 420. |
| 8 | N | B 966 | WB | IV 4 | - | ø rim : ± 300. Coated with bitumen inside and over rim. |
| 9 | N | - | WB | IV | - | ø rim : 288. FRANKE 1978, fig. 61 : 4. |
| 10 | N | C 1107 | WA | V | buff | ø rim : -. |
| 11 | N | 2P 413 | TB | III 1 | brown | ø rim : 355. *OIP* 78, Pl. 88 : 3. |

1) See *TD* 2, 38 for the stratigraphical correction.

Continued on Pl. 21

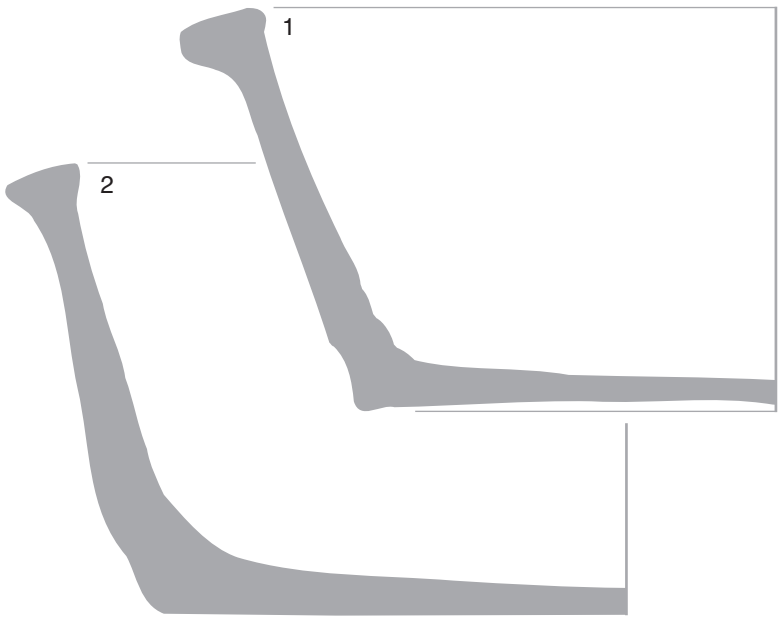



10 cm

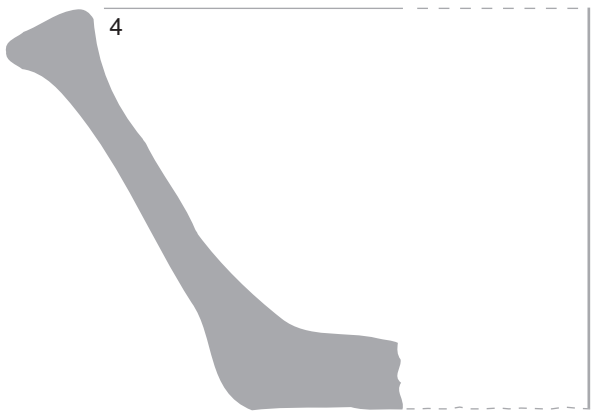
(Photos at various scales)

10 J 1

—1500




—1600



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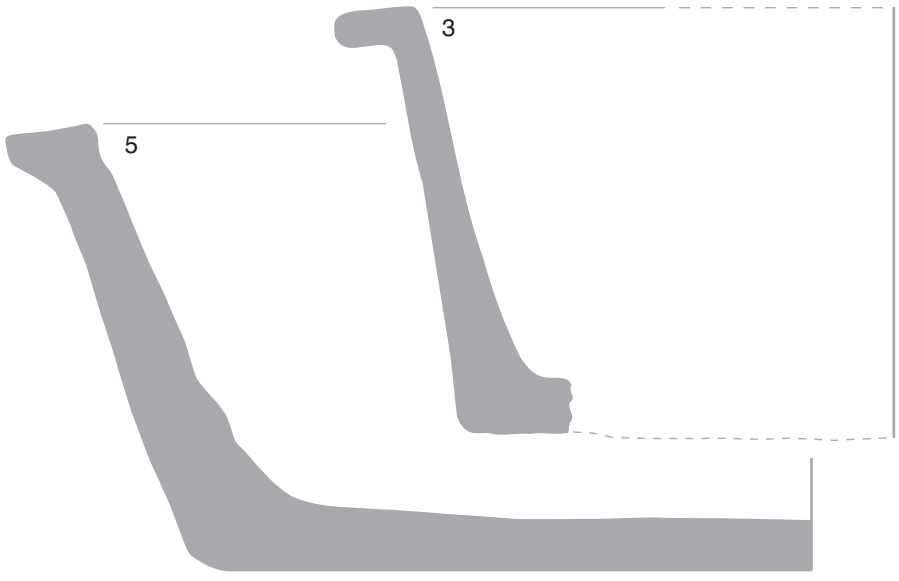
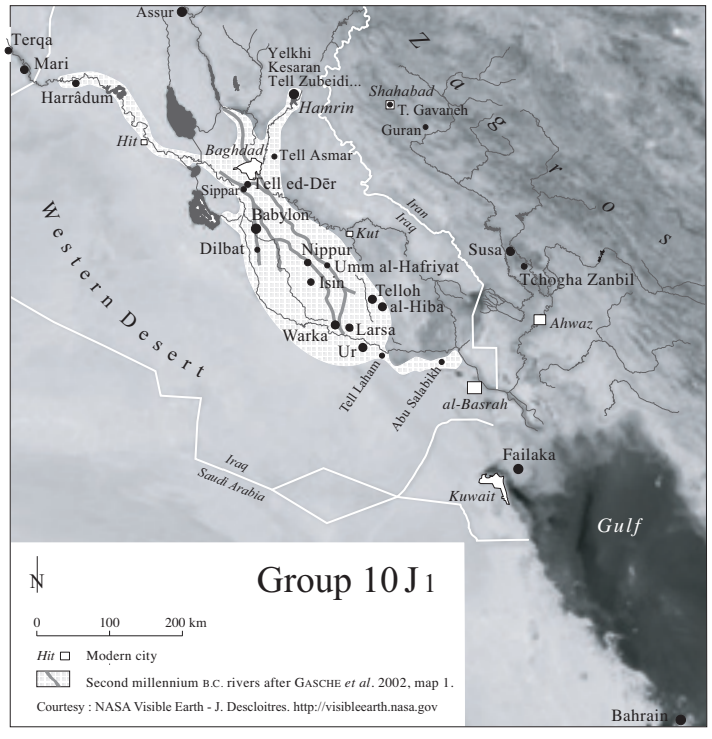
# PLATE 21

## 10 J 1

Continued from Pl. 20

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| MIDDLE EUPHRATES | | | | | | |
| 1 | Din | V 451 | *Bât.* 26 | $3B_1$ | *vert (surcuit)* | ø rim : 338. *Haradum* 1, fig. 105 : 1. |
| 2 | Din | V 211 | *Bât.* 4 | $3B_2$ | *beige* | ø rim : 354. *Haradum* 1, fig. 104 : 3. |
| DIYALA | | | | | | |
| 3 | Yel | y 418 | B | IIIb/ IVa | *verde* | ø rim : ± 303. GABUTTI 2002-03, Pl. 40 : 5. |
| 4 | Yel | y 477 | B | IVa-b | - | ø rim : 321. GABUTTI 2002-03, Pl. 40 : 3. |
| 5 | Yel | y 476 | B | IVa-b | - | ø rim : 418. GABUTTI 2002-03, Pl. 40 : 7. |




10 cm

(Photos at various scales)

DIYALA

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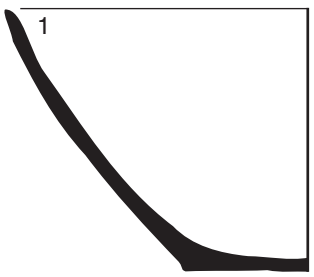
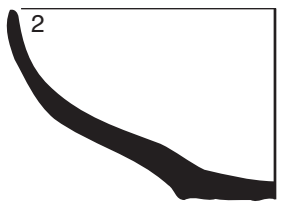
1



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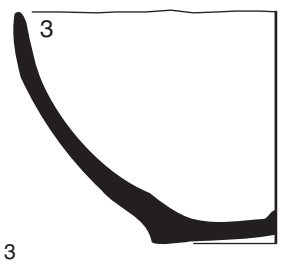


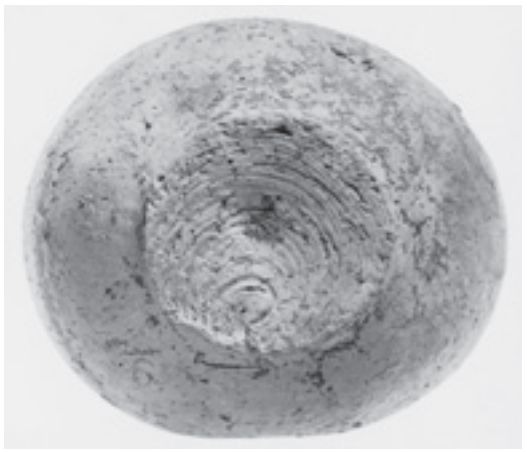

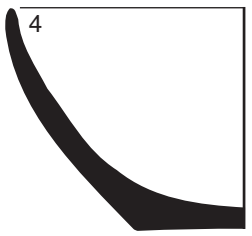


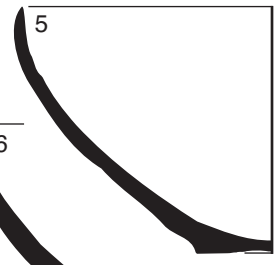


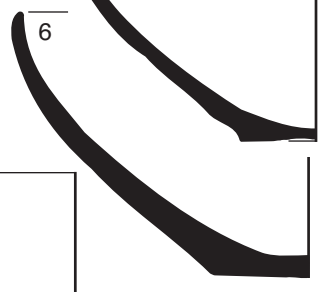


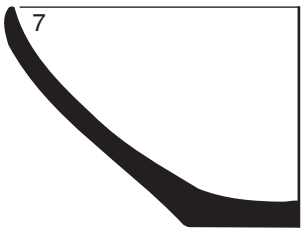


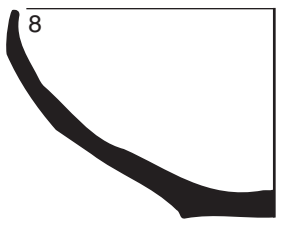


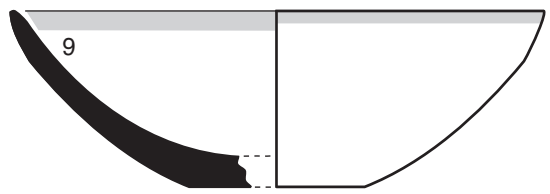


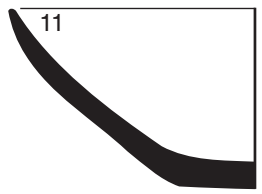


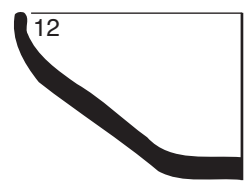

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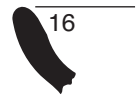

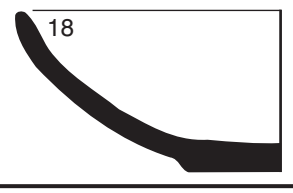


—1600

—1700

—1800

—1900

NORTHERN ALLUVIAL PLAIN

SOUTHERN ALLUVIAL PLAIN

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# PLATE 22

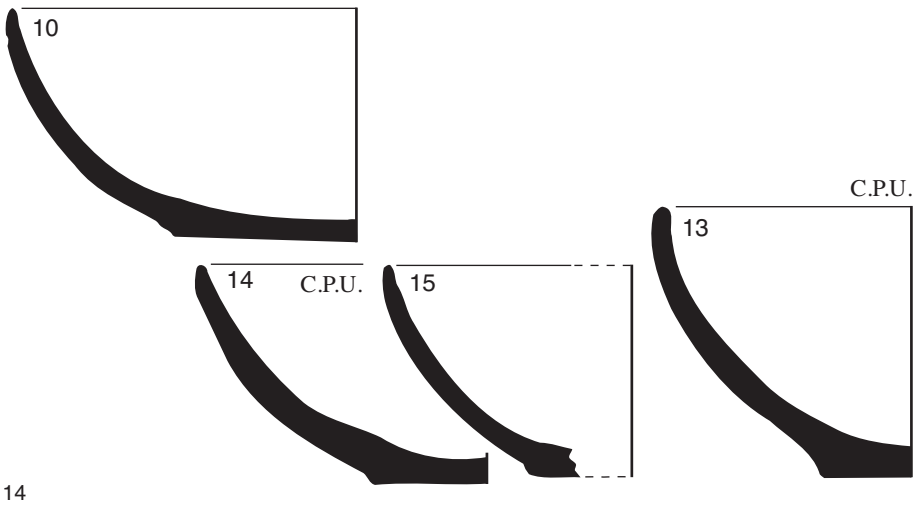
## 15 A 1

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | D | 101642 | A | Ia | 5YR 6/6 | ø rim : 138-156. Irregular shape and crack in rim filled before firing. Burial D.51 dug from Ia. |
| 2* | D | 100383 | A | Ia | 7.5YR 6/4 | ø rim : 140. *TD* 1, Pl. 11 : 8. |
| 3* | D | 100345 | A | Ic[1)] | 7.5YR 6/4 | ø rim : 121-140. *TD* 1, Pl. 11 : 9. |
| 4* | D | 100368 | A | Ie[1)] | 5Y 7/2 | ø rim : 125. *TD* 1, Pl. 11 : 10. |
| 5 | D | 101836 | A | Ig | 2.5Y 8/4 | ø rim : 133-140. |
| 6* | D | 101112 | A | Ih | 2.5YR 8/2 | ø rim : 146-158. |
| 7 | D | 102305 | A | Ii | 5Y 8/2 | ø rim : 146-158. Burial D.146 dug from Ii. |
| 8* | D | 101489 | A | Ii | 5YR 6/6 | ø rim : 135. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 9 | I | 0264 | *NOA* I | 7,20m | 7.5YR 6/6<br>S : 2.5Y 8/2 | ø rim : 140. Dark-painted band over rim. |
| 10 | N | 3P 374 | TA | X | tan<br>S : buff | ø rim : 179. *OIP* 78, Pl. 93 : 7. |
| 11 | N | 12 N 725 | WB | IV 2 | buff<br>S : cream | ø rim : 130. |
| 12 | N | 12 N 430 | WB | IV 2 | pinkish-buff<br>S : pinkish-cream | ø rim : 118. |
| 13 | W | 19972a | Sînkāšid | 5a | - | ø rim : 138. VAN ESS 1988a, fig. 4 : 48. |
| 14 | L | L. 313 | - | - | 10YR 8/2 | ø rim : 151. Burial 96. Exc. Parrot, 1933. Louvre, AO 17011. Drawn at the Louvre. PARDO 1979, Pl. 12. |
| 15* | L | 59.103 | *Mais*. 59 | *Sols* | 5YR 7/6 | ø rim : ± 130. Exc. Huot. CALVET 2003, fig. 70. Redrawn. |
| 16 | N | B 571 | WA | V | reddish | ø rim : ± 120. |
| 17 | N | B 734 | WA | V | reddish-buff | ø rim : ± 120. |
| 18 | N | B 620 | WA | VIA | red | ø rim : 140. |

1) See *TD* 2, 38 for the stratigraphical correction.

C.P.U. = Chronological Position Uncertain

Continued on Pl. 23

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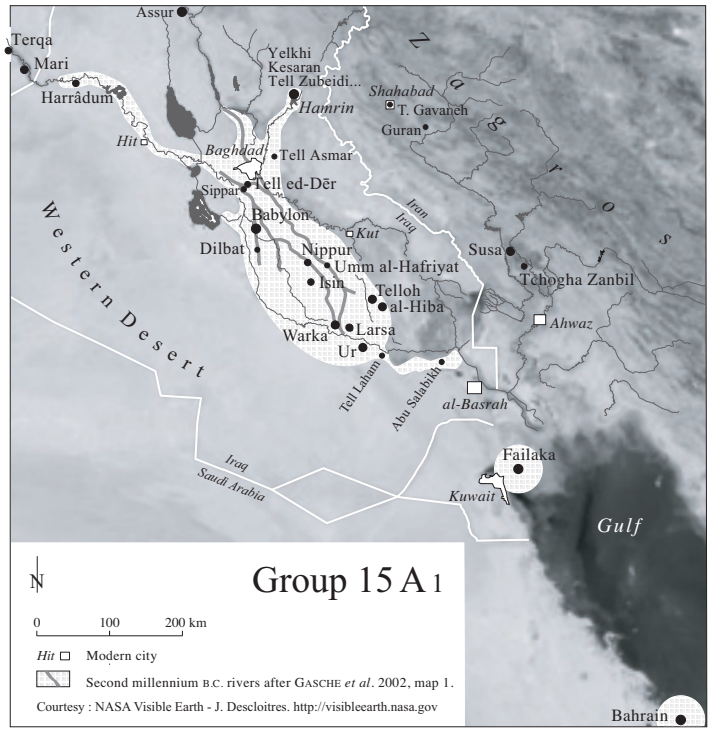


10 cm

(Photos at various scales)

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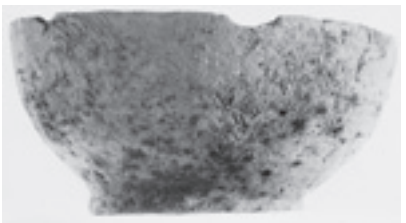
15 A 1

15 A 2

—1500



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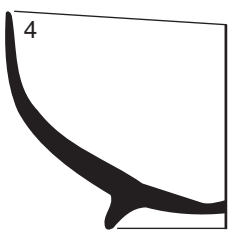
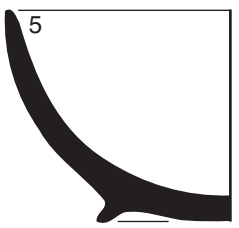
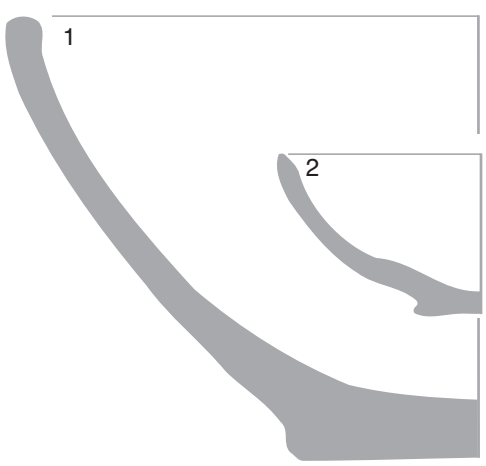
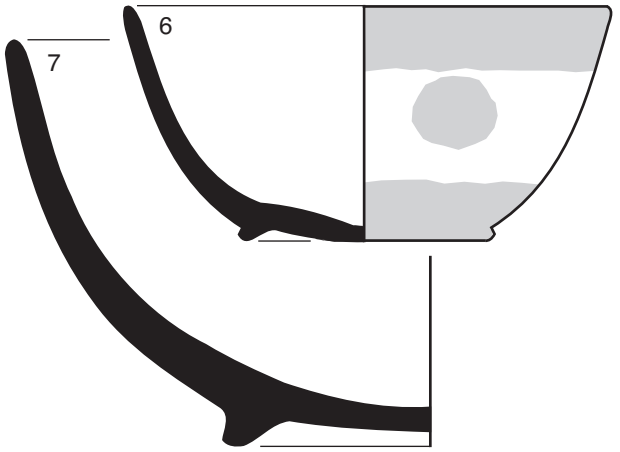
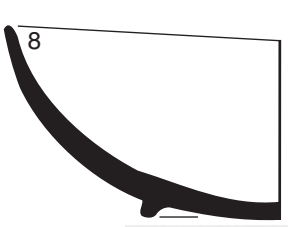


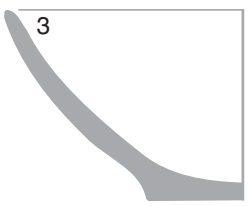



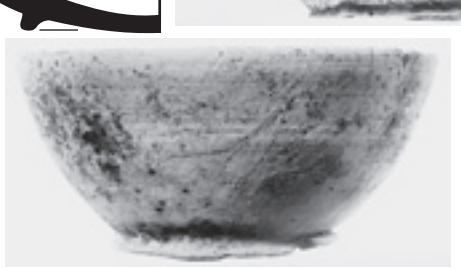



8

—1600



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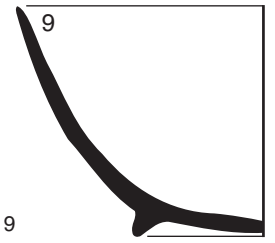
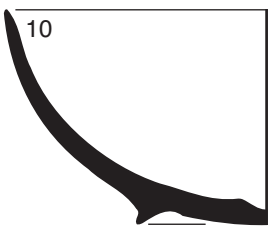
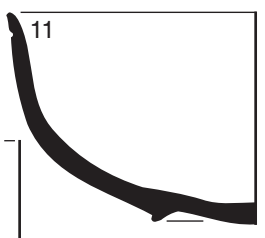
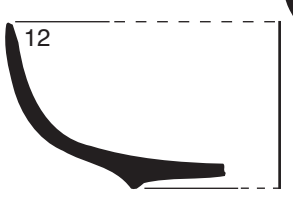


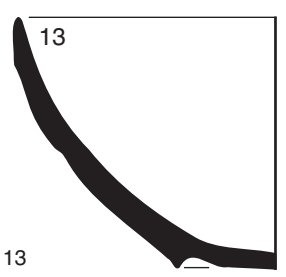




—1700

13



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# PLATE 23

## 15 A 1

Continued from Pl. 22

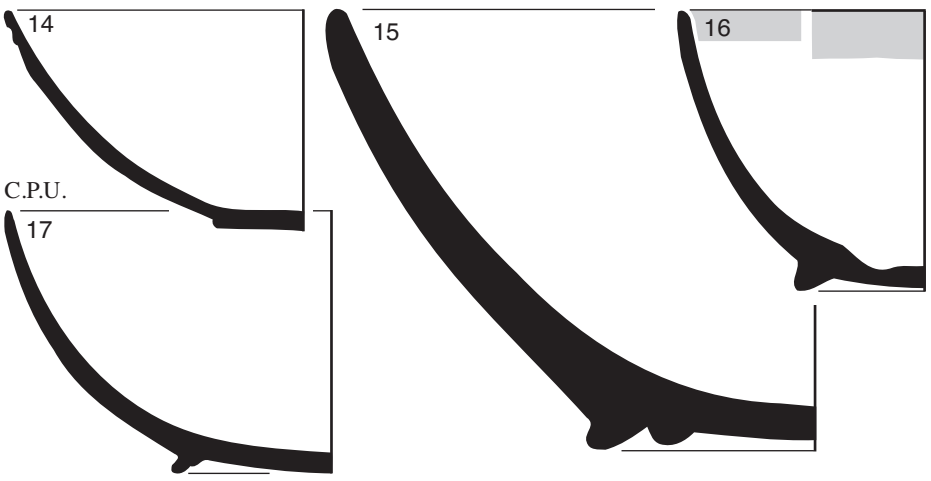
| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| MIDDLE EUPHRATES | | | | | | |
| 1 | Din | V 114 | *Bât.* 14 | $3B_2$ | *beige* | ø rim : 117. *Haradum* 1, fig. 106 : 1. |
| 2 | Din | V 491 | *Bât.* 3 | $3B_2$ | *beige* | ø rim : 274. *Haradum* 1, fig. 113 : 18. |
| DIYALA | | | | | | |
| 3 | Yel | y 411 | B | IVb | *cuoio* | ø rim : 126. GABUTTI 2002-03, Pl. 29 : 12. |

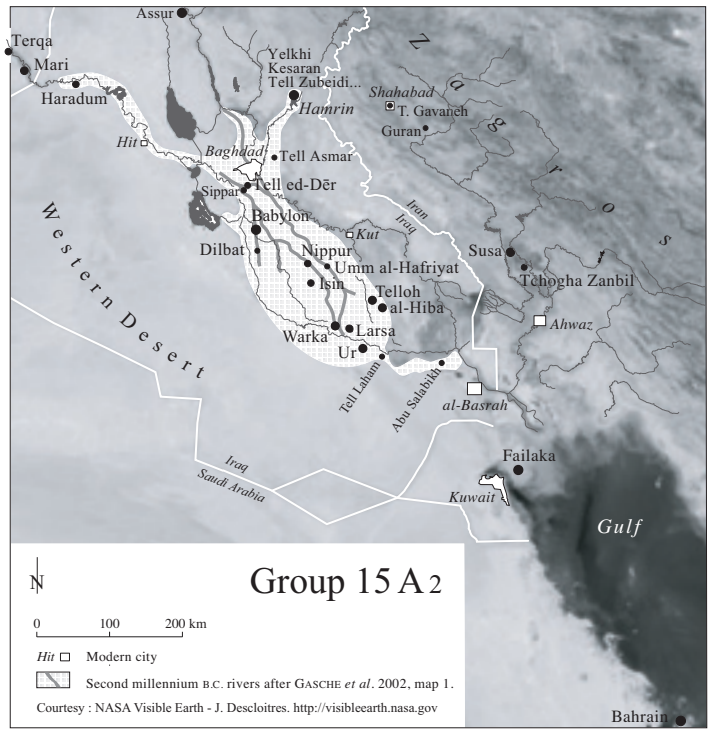
## 15 A 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 4 | D | 105787 | E | IIId | 10YR 7/4 | ø rim : 114. Burial D.322 dug from IIId. *MHEM* 1, Pls. 22 and 27 : 23. |
| 5* | D | 103927 | E | IIId | 5YR 6/6 | ø rim : 118. *MHEM* 1, Pl. 27 : 21. |
| 6* | D | 103946 | E | IIId-e | 7.5YR 8/4 | ø rim : 126. *MHEM* 1, Pl. 27 : 25. Geometric design on exterior in dark paint (10YR 5/1). |
| 7* | D | 100270 | A | 0 | 10YR 7/3 | ø rim : 225. *TD* 1, Pl. 13 : 2. |
| 8* | D | 100244 | A | Ia | 5YR 6/6 | ø rim : 145. *TD* 1, Pl. 11 : 7. |
| 9 | D | 101641 | A | Ia | 7.5YR 6/4 | ø rim : 127. Burial D.51 dug from Ia. |
| 10 | D | 100991 | A | Ic | 7.5YR 6/4 | ø rim : 137. |
| 11 | D | 100960 | A | Id | 7.5YR 6/4 | ø rim : 132. *TD* 2, Pl. 18 : 2. |
| 12 | D | 100865 | A | Ie | 10YR 8/4 | ø rim : ± 142. |
| 13* | D | 101496 | A | Ih | 7.5YR 6/4 | ø rim : 135. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 14 | N | A 2012 | WB | IV 6 | buff | ø rim : 159. Finished base. |
| 15 | I | 0279 | *NOA* IV | 7,30m | 7.5YR 7/4<br>S : 2.5Y 8/2 | ø rim : 260. *Isin* 3, 75, Pl. 28 : 3. |
| 16 | N | 3P 309 | TA | X | tan<br>S : buff | ø rim : 128. *OIP* 78, Pl. 93 : 8. Dark-painted band over rim. |
| 17 | W | 20791 | Sînkāšid | 5 | *rot* | ø rim : 174. VAN ESS 1988a, fig. 4 : 49. |

C.P.U. = Chronological Position Uncertain

Continued on Pl. 24




10 cm

(Photos at various scales)

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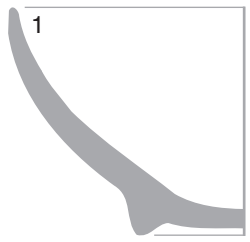
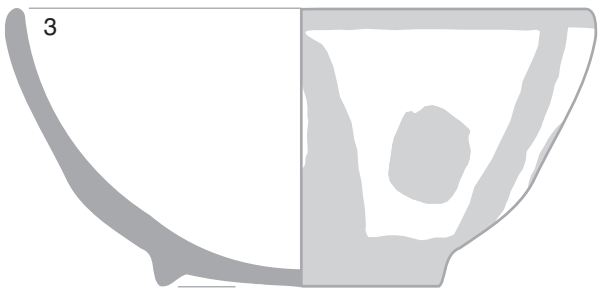
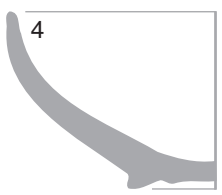
—1500

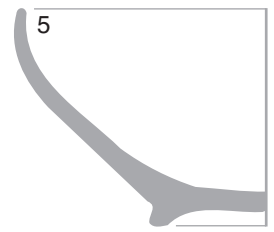
## 15 A 2

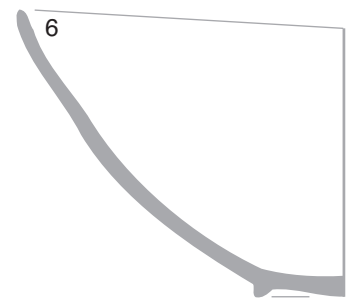
## 15 B 1

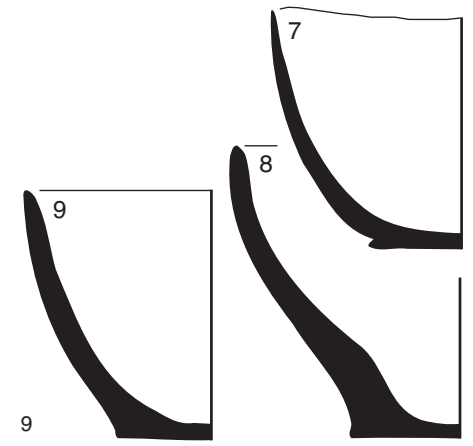


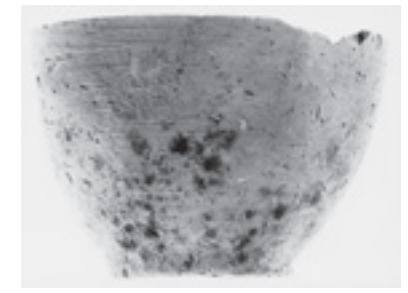



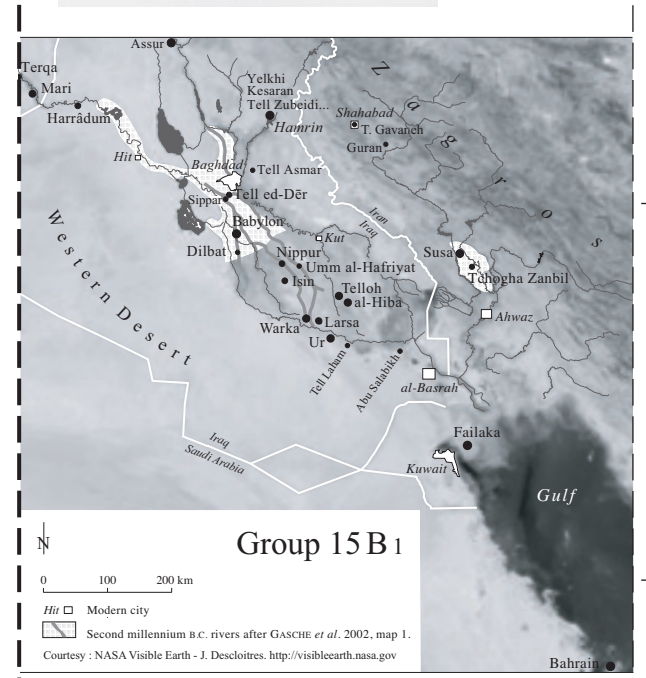



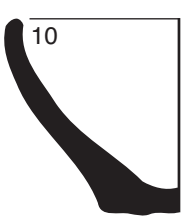



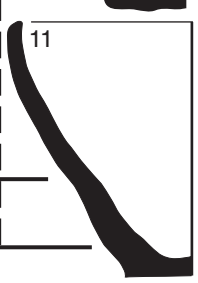




9





—1600

—1700

—1800

—1900

—2000

◄◄ MIDDLE EUPHRATES DIYALA N. A. P. SUSIANA

⇩

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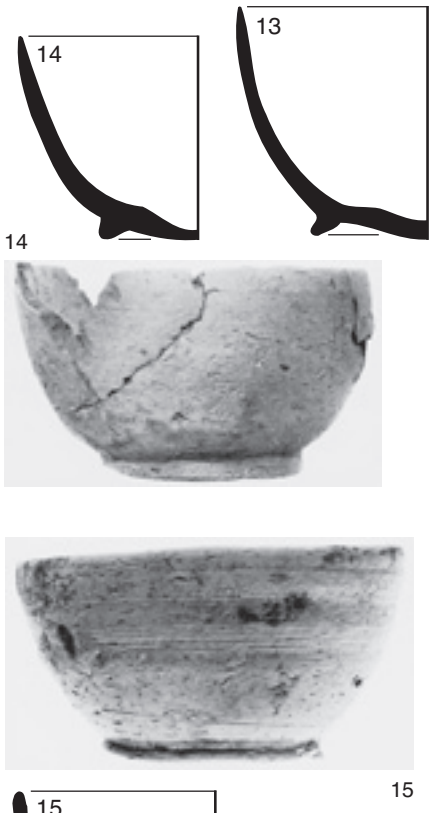
15 B 2




N. A. P. S. A. P.

# PLATE 24

## 15 A 2

Continued from Pl. 23

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| MIDDLE EUPHRATES | | | | | | |
| 1 | Din | V 246 | *Bât.* 2 | $3B_1$ | *beige/beige Rosé* | ø rim : 135. *Haradum* 1, fig. 114 : 4. |
| 2 | Din | V 183 | *Bât.* 2 | $3B_1$ | *beige rosé* | ø rim : 130. *Haradum* 1, fig. 114 : 3. |
| 3 | Din | V 109 | *Bât.* 3 | $3B_2$ | *beige rosé* | ø rim : 168. *Haradum* 1, fig. 113 : 15. Geometric design on exterior in dark paint. |
| 4 | Din | V 433 | *Bât.* 10 | 3C | *beige* | ø rim : 118. *Haradum* 1, fig. 113 : 7. |
| DIYALA | | | | | | |
| 5 | Yel | HY 195/4 | B | III | *cuoio* | ø rim : 130. Burial 17. GABUTTI 2002-03, Pl. 29 : 10. |
| 6 | Yel | y 252 | B | Vb | *giallo-verdastro* | ø rim : 170. GABUTTI 2002-03, Pl. 28 : 13. |

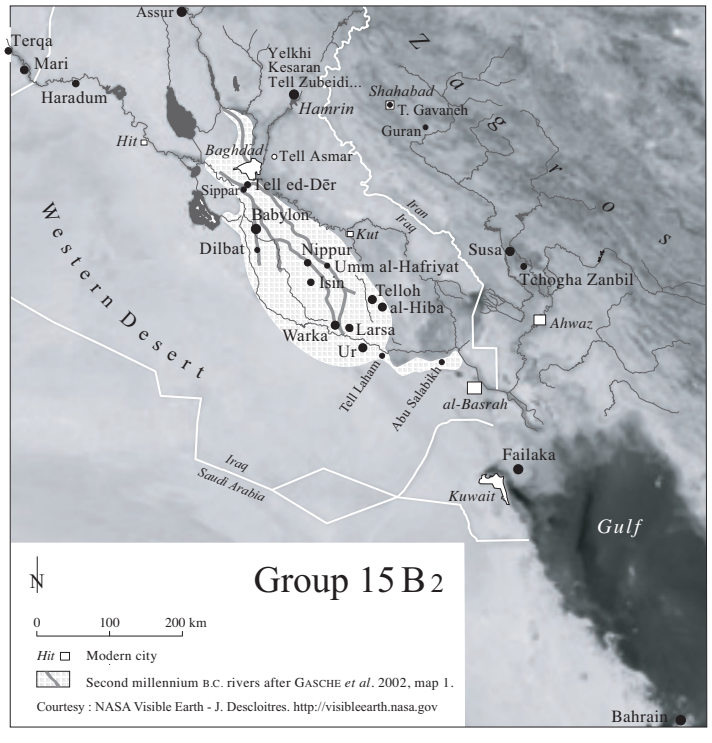
## 15 B 1

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 7* | D | 103366 | E *sud* | 0 | 7.5YR 6/4 | ø rim : 100. Burial D.203 dug from Ensemble 0. |
| 8 | D | 104448 | E | IIId | 5YR 6/4 | ø rim : 120. Burial D.276 dug from IIId. *MHEM* 1, Pls. 15 and 27 : 7. |
| 9* | D | 105740 | E | IIId | 7.5YR 7/4 | ø rim : 95. *MHEM* 1, Pl. 27 : 14. |
| 10* | D | 104088 | A | IIIa | 5YR 6/6 | ø rim : 90. |
| 11* | D | 104173 | A | IVb | 5YR 7/3 | ø rim : 97. *TD* 4, Pl. 8 : 1. |
| SUSIANA | | | | | | |
| 12 | S | GS-7106 | B | VI | *brune* | ø rim : 90. *MDP* 47, Pl. 6 : 8. |

## 15 B 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 13 | D | 104390 | E | IIId | 7.5YR 7/4 | ø rim : 100-106. Burial D.272 dug from IIId. *MHEM* 1, Pls. 21 and 27 : 22. |
| 14* | D | 103473 | E | IIId | 5YR 5/6 | ø rim : 95. Burial D.218 probably dug from IIId. *MHEM* 1, Pls. 23 and 27 : 19. |
| 15* | D | 101245 | A | Ic | 10YR 8/4 | ø rim : 108. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 16 | W | 20124,3 | Sînkāšid | 5a | *gelb* | ø rim : 105. VAN ESS 1988a, fig. 4 : 51. |

C.P.U. = Chronological Position Uncertain




10 cm

(Photos at various scales)

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15 C

15 D

—1600

—1700

—1800

—1900

—2000

NORTHERN ALLUVIAL PLAIN

N. A. P.

S. A. P.

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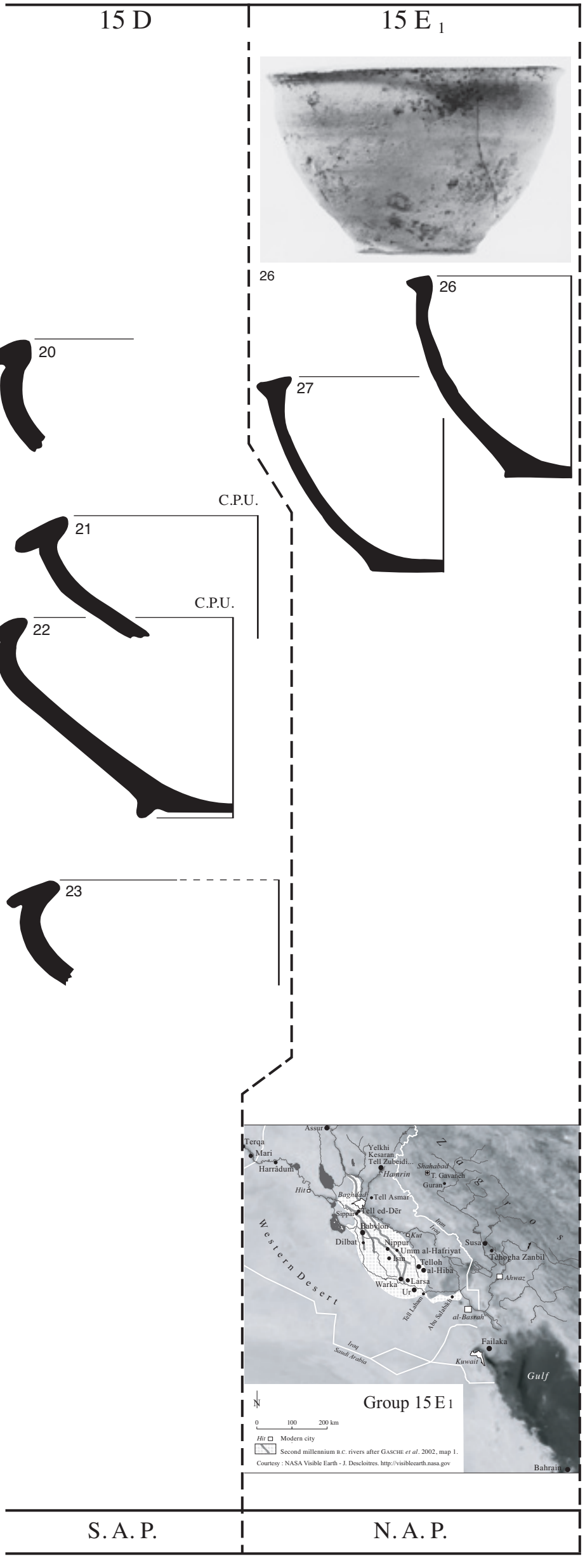
# PLATE 25




## 15 C

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 102885 | A | IIc | 10YR 7/3 | ø rim : -. |
| 2* | D | 102515 | A | IIc | 2.5Y 7/2 | ø rim : 210. *TD* 4, Pl. 15 : 9. |
| 3* | D | 104259 | A | IIe | 10YR 6/4 | ø rim : 300. |
| 4* | D | 104273 | A | IIg | 10YR 7/3<br>S : 2.5YR 7/4 | ø rim : 300. |
| 5* | D | 102703 | A | IVa | 10YR 7/3 | ø rim : 270. |

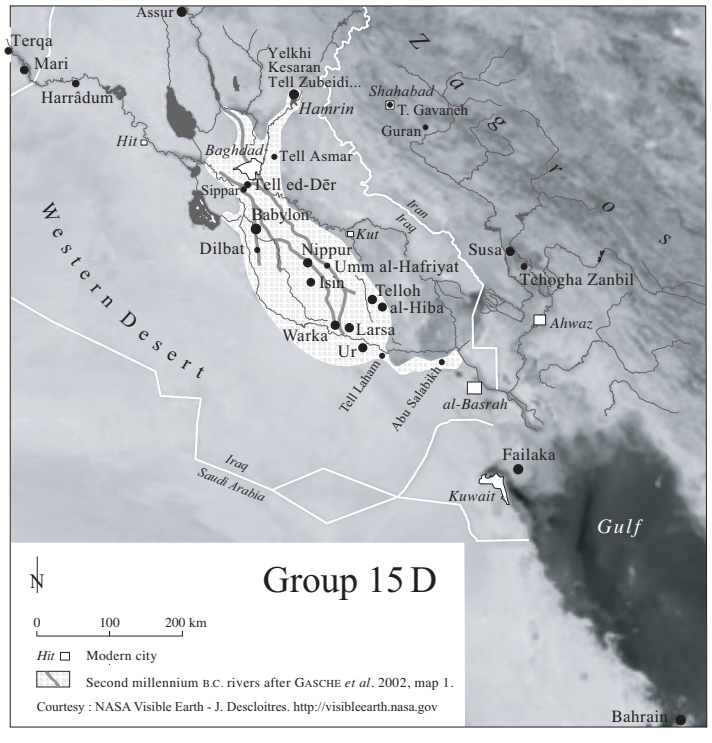
## 15 D

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 6* | D | 101438 | A | Ie | 7.5YR 7/4 | ø rim : ± 140. |
| 7* | D | 100363 | A | Ie[1)] | 5YR 7/3 | ø rim : ± 160. *TD* 1, Pl. 12 : 14. |
| 8* | D | 101848 | A | Ig | 10YR 7/4 | ø rim : ± 150. |
| 9* | D | 100523 | A | Ig[1)] | 7.5YR 7/4<br>S : 10YR 8/3 | ø rim : ± 140. *TD* 1, Pl. 12 : 13. |
| 10* | D | 100493 | A | Ig | 7.5YR 6/4<br>S : 10YR 8/3 | ø rim : ± 110. |
| 11* | D | 101677 | A | Ih | 10YR 8/3 | ø rim : ± 140. |
| 12* | D | 100110 | A | Ii | 10YR 7/3 | ø rim : -. |
| 13* | D | 100102 | A | Ii[1)] | 10YR 7/3 | ø rim : ± 140. *TD* 1, Pl. 12 : 9. |
| 14* | D | 100208 | A | Ii[1)] | 7.5YR 6/4 | ø rim : ± 110. *TD* 1, Pl. 12 : 16. |
| 15* | D | 100561 | A | Ik | 7.5YR 7/4<br>S : 10YR 8/3 | ø rim : ± 180. |
| 16* | D | 102672 | A | IIa | 7.5YR 7/4 | ø rim : 205. *TD* 4, Pl. 18 : 8. |
| 17* | D | 102870 | A | IIc | 7.5YR 7/4 | ø rim : 220. |
| 18* | D | 104254 | A | IIe | 10YR 7/3 | ø rim : 170. Pit 12 dug from IIe. |
| 19* | D | 104256 | A | IIId | 7.5YR 6/4 | ø rim : 210. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 20 | N | B 731 | WA | V | pink | ø rim : -. |
| 21 | H | 1 HP 607 | B | - | - | ø rim : 202. |
| 22 | I | 0255 | *SOA* | - | *rötlich*<br>S : *hellgelb* | ø rim : 198. |
| 23 | N | B 622 | WA | VIA | reddish-buff | ø rim : ± 230. |
| 24 | U | 245 | A | II | pink | ø rim : -. |
| 25 | U | 442 | A | III | pink | ø rim : -. |

## 15 E 1

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 26* | D | 101522 | A | If | 10YR 8/4 | ø rim : 138. |
| 27* | D | 101977 | A | Ig | 2.5YR 5/6 | ø rim : 155. Burial D.119 dug from Ig. |

1) See *TD* 2, 38 for the stratigraphical correction.




10 cm

(Photos at various scales)

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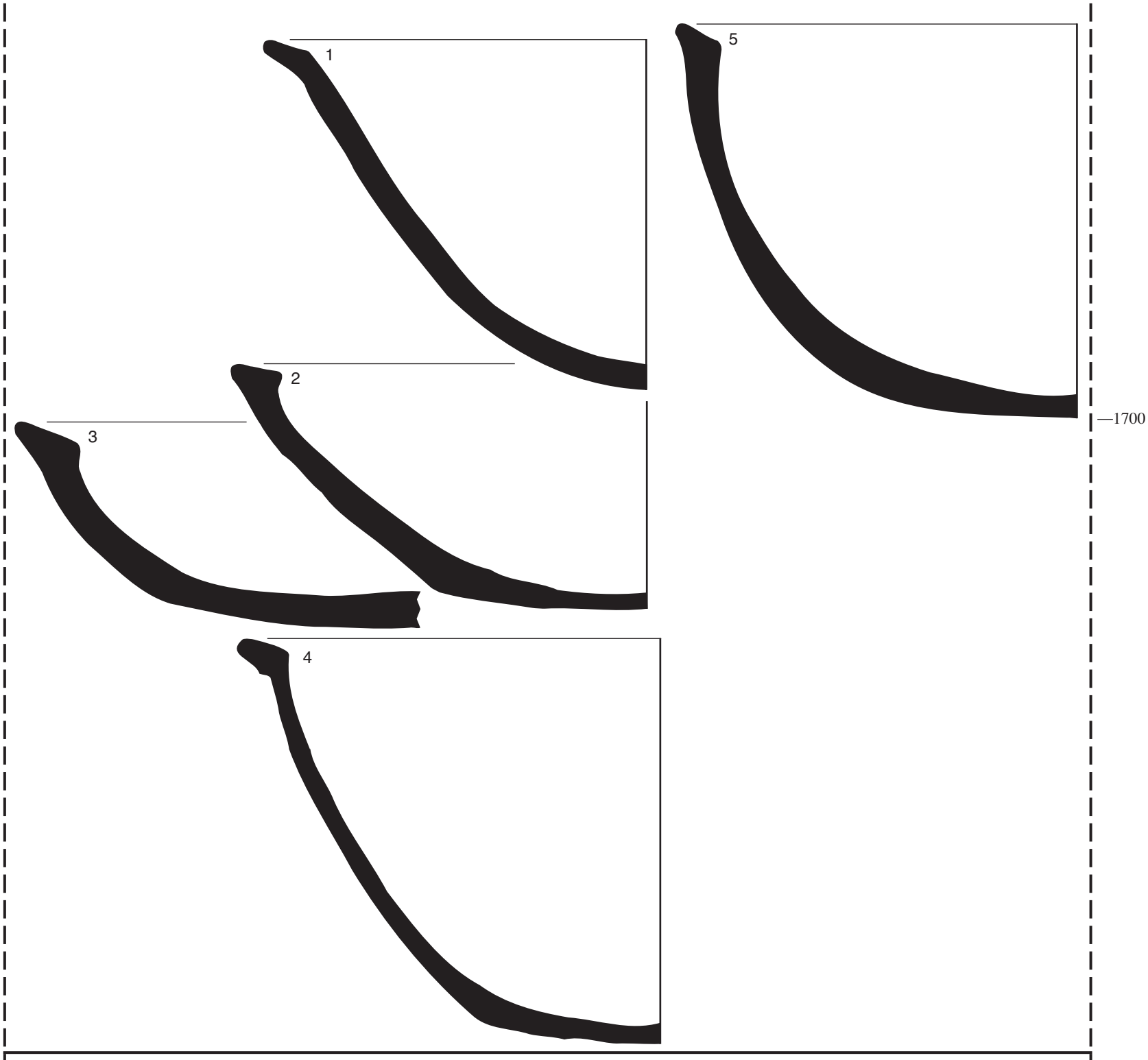
15 F 3

—1500

—1550

—1650




—1700

NORTHERN ALLUVIAL PLAIN

SOUTHERN ALLUVIAL PLAIN

—1800

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# PLATE 26

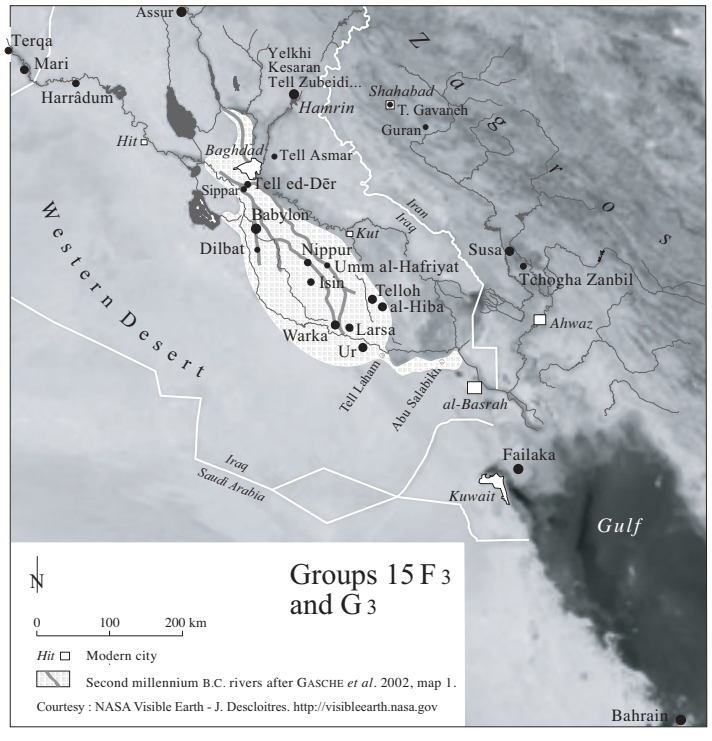
## 15 G 3

## 15 F 3

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 101986 | A | Ie | 7.5YR 6/4 | ø rim : 295. Burial D.127 probably dug from Ie. |
| 2* | D | 101929 | A | Ig | 5YR 6/4 | ø rim : 320. Burial D.44 dug from Ig. SALLABERGER 1996, Pl. 1 : 7. |
| 3* | D | 102354 | A | Ig | 7.5YR 6/4 | ø rim : ± 310. Burial D.152 dug from Ig. |
| 4* | D | 101881 | A | Ii | 5YR 6/4 | ø rim : 325. Burial D.93 dug from Ii. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 5 | N | 3P 479 | TA | XI | tan | ø rim : 310. *OIP* 78, Pl. 93 : 11. Used for infant burials. |

## 15 G 3

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 6* | D | 103961 | E | IIIb | 10YR 7/2 | ø rim : 255. *MHEM* 1, Pl. 28 : 4. |




10 cm

(Photos at various scales)

NORTHERN ALLUVIAL PLAIN

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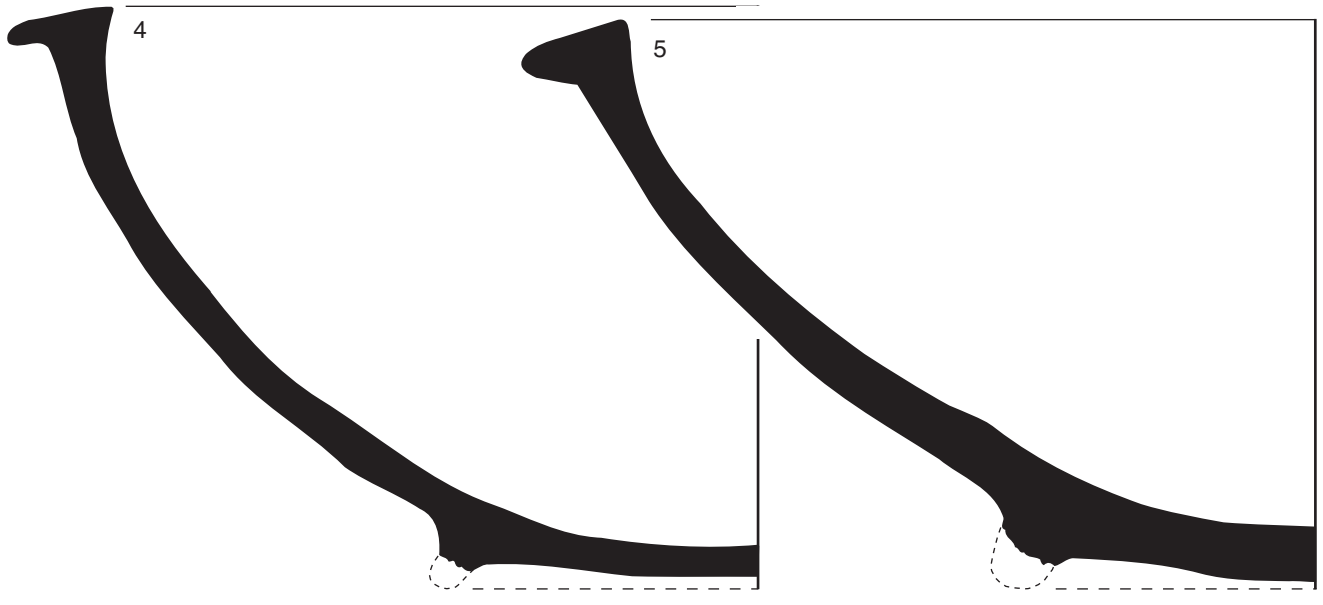
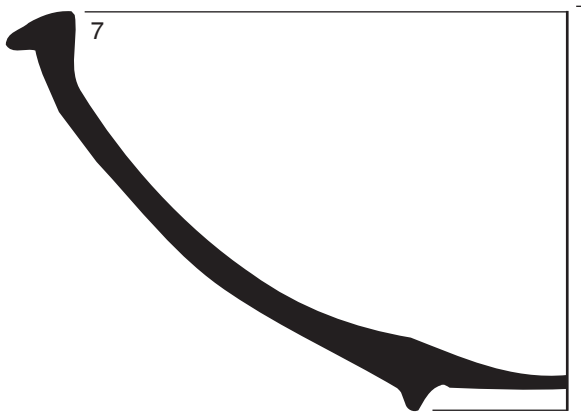
15 H 1

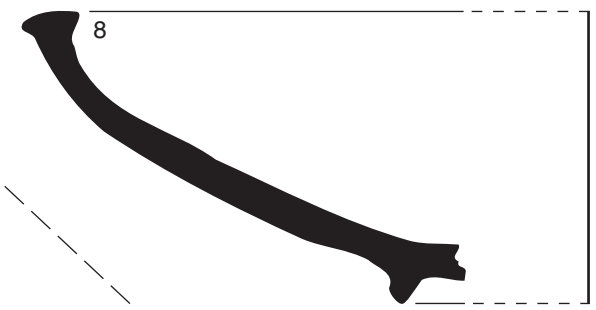
15 H 2

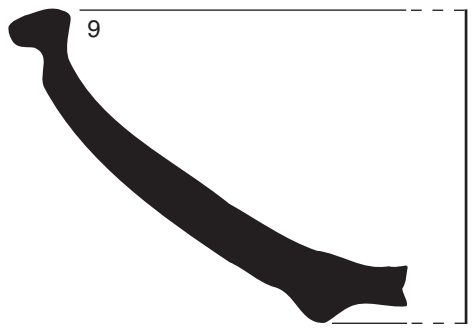
—1700



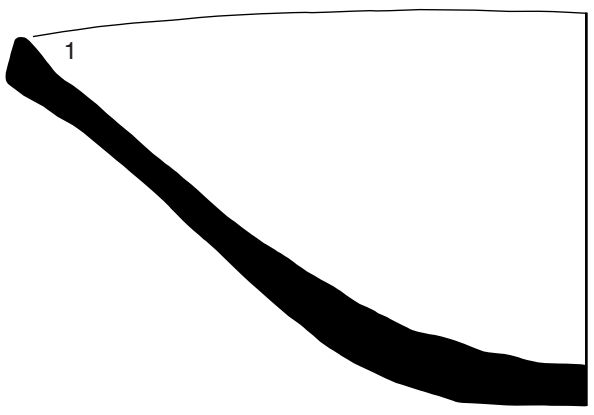

—1800




—1900




SOUTHERN ALLUVIAL PLAIN

NORTHERN ALLUVIAL PLAIN

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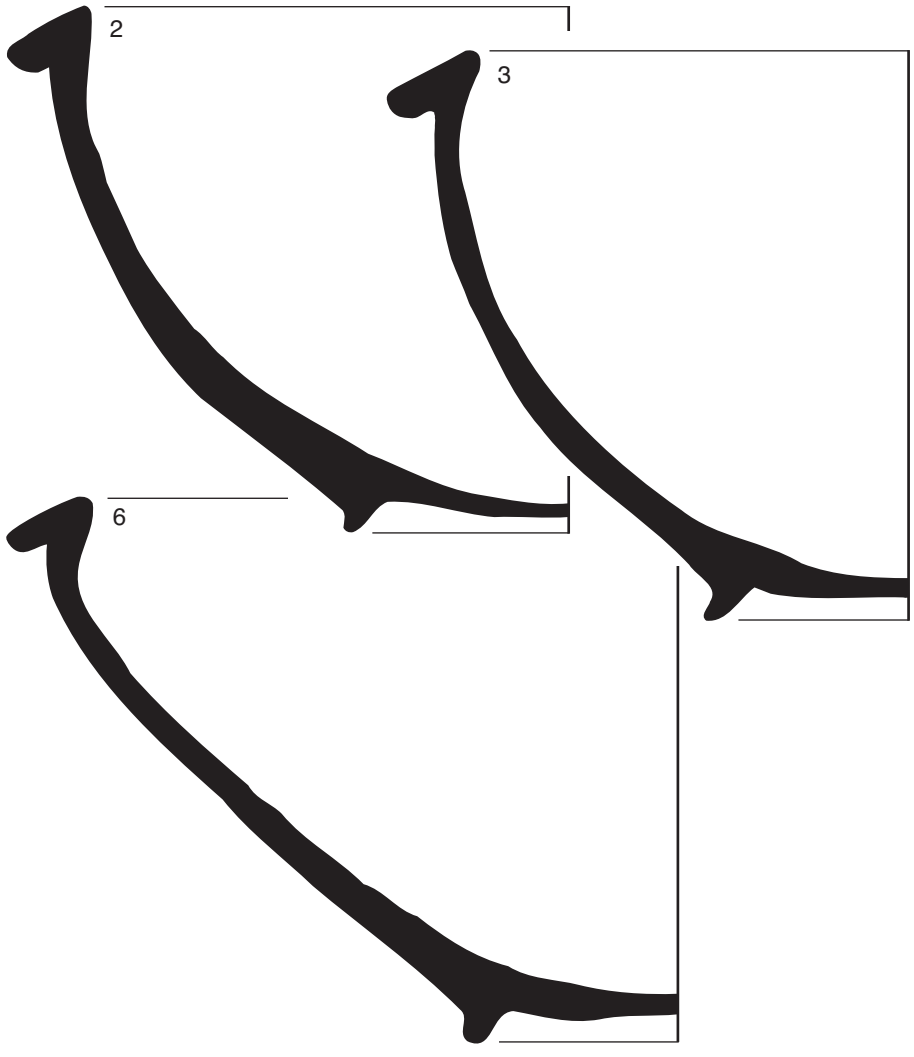
## 15 H 2



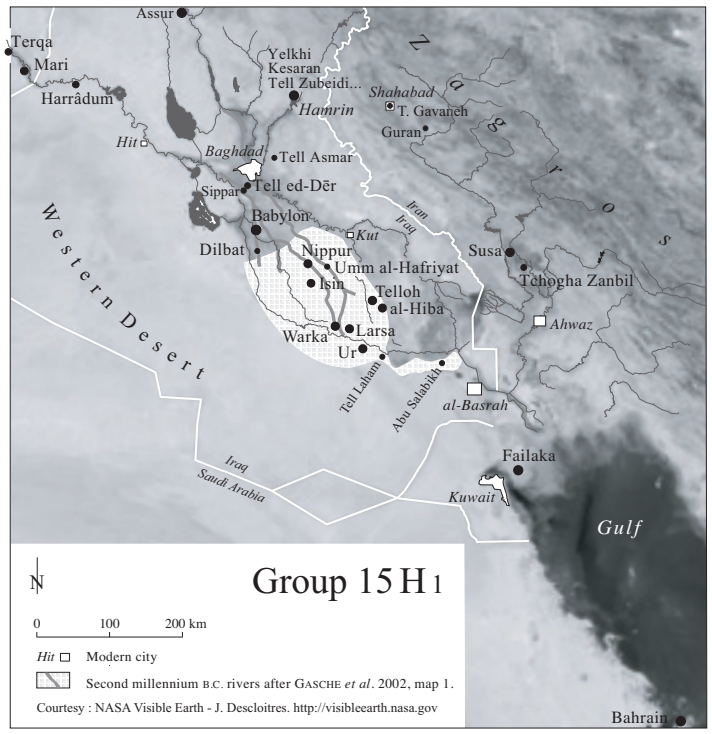

## 15 H 1

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | N | 17 N 57 | WC-3 | VB | pink<br>S : buff | ø rim : 310. Burial 101 dug from VB. |

## 15 H 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 2* | D | 102339 | A | Ig | 7.5YR 6/4 | ø rim : 297. Burial D.150 dug from Ig. |
| 3* | D | 102923 | A | Ig | 2.5Y 7/2 | ø rim : 272. Burial D.199 dug from Ig. |
| 4* | D | 102342 | A | Ii | 7.5YR 6/4 | ø rim : 415. Burial D.151 dug from Ii. |
| 5* | D | 102341 | A | Ii | 5YR 6/4 | ø rim : 398. Burial D.151 dug from Ii. |
| 6* | D | 102971 | A | Ii | 5YR 6/4 | ø rim : 355. Burial D.209B dug from Ii. |
| 7* | D | 102430 | A | IIc | 5YR 6/4 | ø rim : 295. *TD* 4, Pl. 15 : 8. SALLABERGER 1996, Pl. 1 : 9. |
| 8* | D | 102481 | A | IIg | 2.5Y 6/2 | ø rim : ± 300. *TD* 4, Pl. 13 : 7. |
| 9* | D | 104108 | A | IIg | 5YR 6/6 | ø rim : ± 240. *TD* 4, Pl. 13 : 6. |

Continued on Pl. 28




10 cm

(Photos at various scales)

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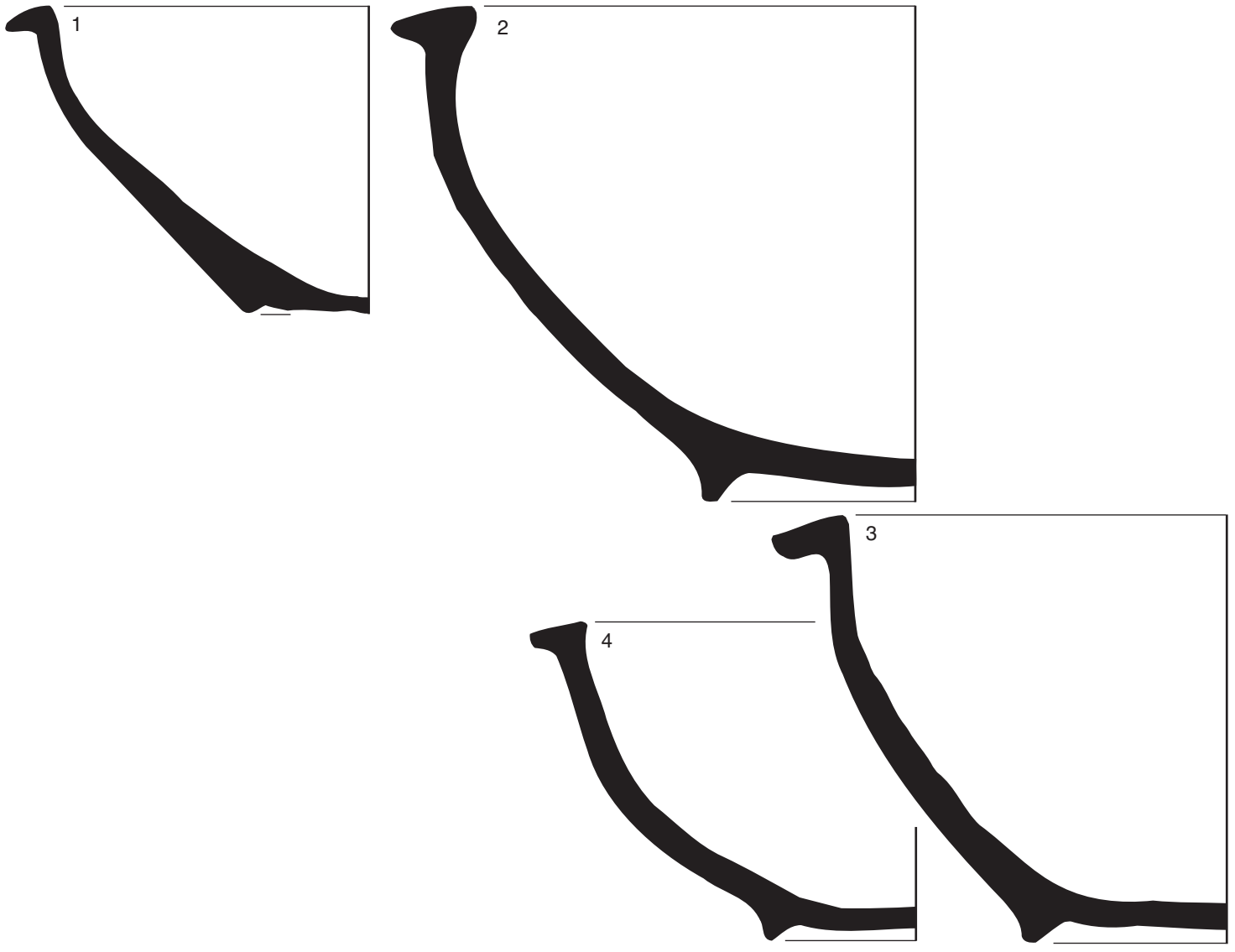
15 $H_2$

—1500




—1600

—1700

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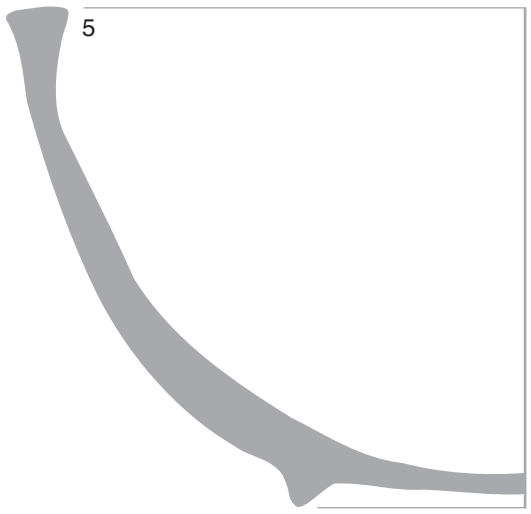
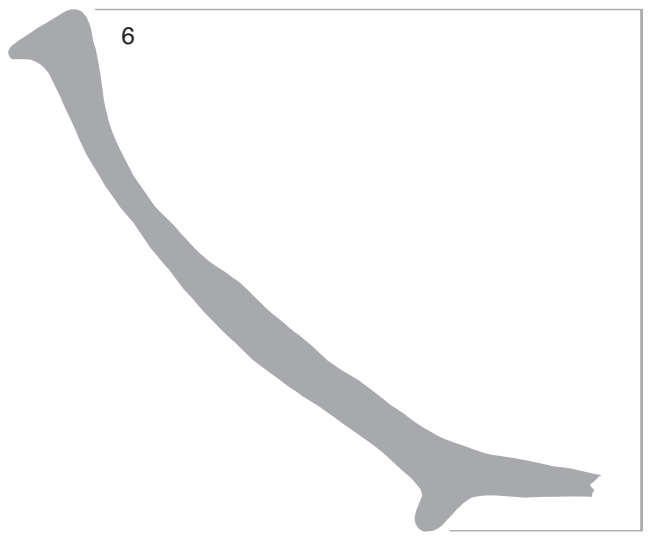
# PLATE 28

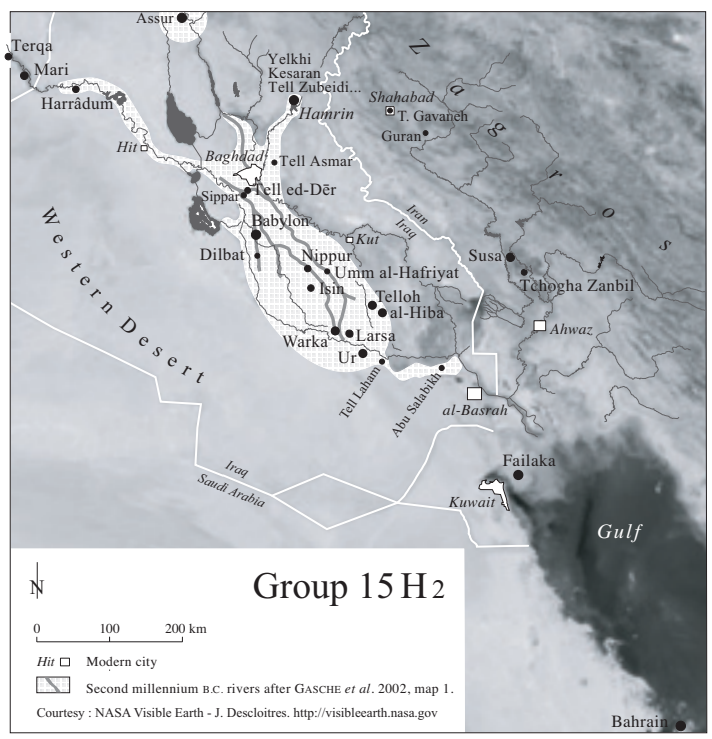
## 15 H 2

Continued from Pl. 27




| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 101337 | A | Ic | 7.5YR 6/4 | ø rim : 228. Burial D.26 probably dug from Ic. |
| 2* | D | 101338 | A | Ic | 5YR 6/6 | ø rim : 328. Burial D.22 probably dug from Ic. |
| 3* | D | 101985 | A | Ie | 7.5YR 6/4 | ø rim : 285. Burial D.127 probably dug from Ie. |
| 4* | D | 101987 | A | Ie | 5YR 5/4 | ø rim : 245. Burial D.126 probably dug from Ie. |
| MIDDLE EUPHRATES | | | | | | |
| 5 | Din | V 233 | *Bât*. 22 | 3A | *beige* | ø rim : 274. Burial 73. *Haradum* 1, fig. 111 : 8. |
| DIYALA | | | | | | |
| 6 | Yel | y 475 | B | IVa-b | - | ø rim : 336. GABUTTI 2002-03, Pl. 36 : 1. |




10 cm

(Photos at various scales)

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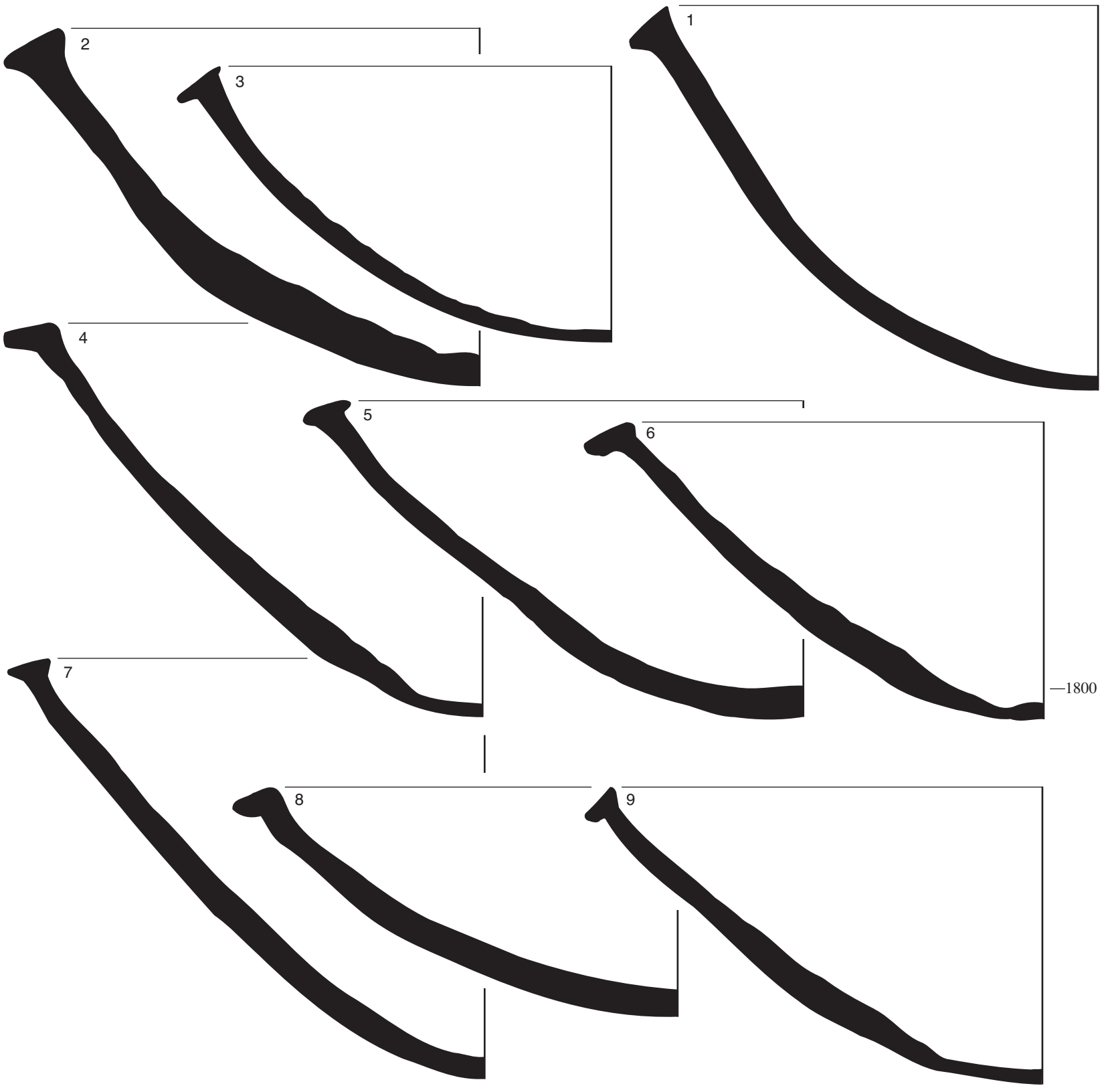
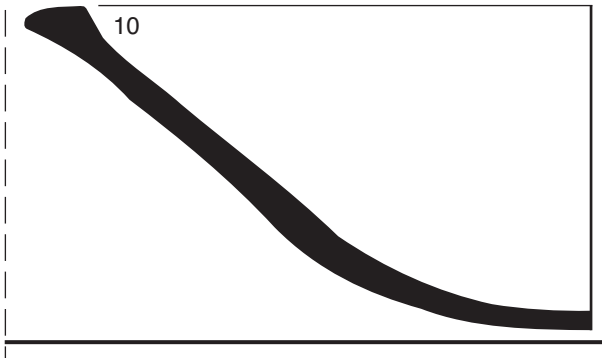
—1750

15 H 3




—1800

—1850




NORTHERN ALLUVIAL PLAIN

—2000

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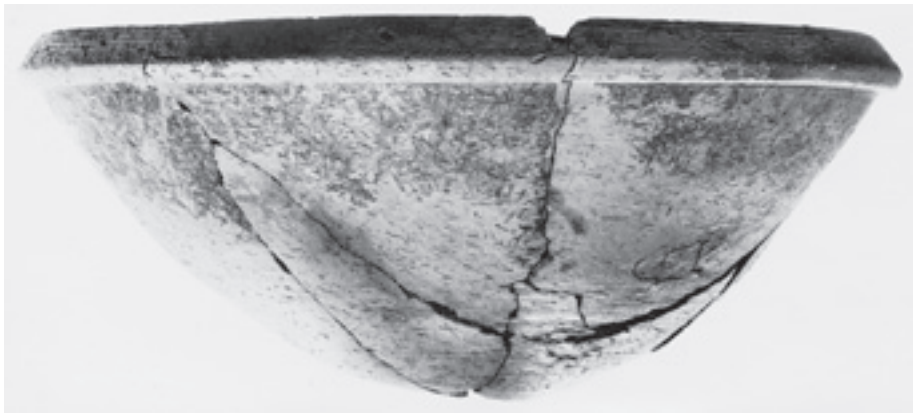


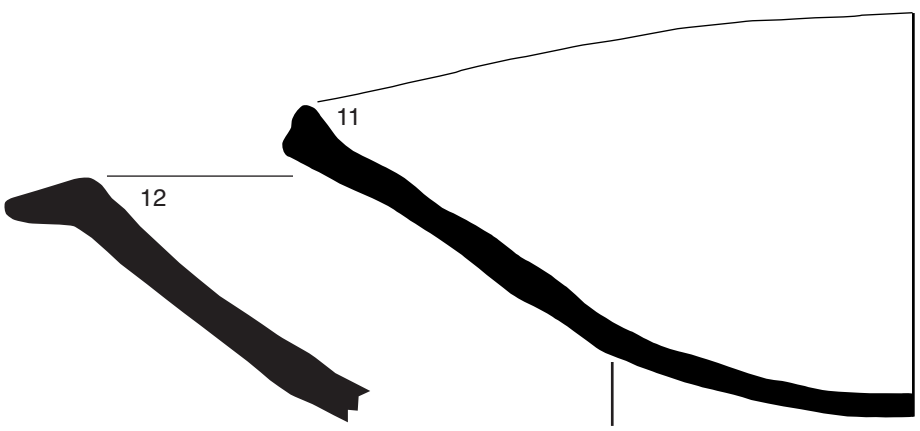
1 (N. A. P.)

## 15 H 3

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 100649 | A | Ii[1)] | 2.5YR 6/4 | ø rim : 370. Burial D.6 dug from Ii. *TD* 1, Pl. 15 : 4. SALLABERGER 1996, Pl. 1 : 10. |
| 2* | D | 102337 | A | Ii | 5YR 6/6 | ø rim : 375. Burial D.155 dug from Ii. |
| 3 | D | 102288 | A | Ii | 5YR 6/6 | ø rim : 344. Burial D.147 dug from Ii. |
| 4* | D | 103717 | A | IIa | 5YR 7/4 | ø rim : 370. Burial D.231 dug from IIa. |
| 5* | D | 103724 | A | IIa | 5YR 6/3 | ø rim : 390. Burial D.234 dug from IIa. |
| 6* | D | 103697 | A | IIa | 5YR 6/4 | ø rim : 360. Burial D.231 dug from IIa. |
| 7* | D | 104074 | A | IIc | 5YR 6/6 | ø rim : 380. Burial D.262 dug from IIc. |
| 8* | D | 102811 | A | IIc | 5YR 6/4 | ø rim : 345. Burial D.195 dug from IIc. |
| 9* | D | 102851 | A | IIc | 5YR 6/6 | ø rim : 360. Burial D.196A dug from IIc. |
| 10* | D | 104141 | A | IVb | 5YR 6/6 | ø rim : 280. Burial D.266 dug from IVb. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 11 | N | 17 N 58 | WC-3 | VB | pink<br>S : buff | ø rim : 328. Burial 101 dug from VB. |
| 12 | N | H 855 : 4 | WF | X | pink<br>S : pale buff | ø rim : 317. *OIP* 129, Pl. 92 : 4. |

1) See *TD* 2, 38 for the stratigraphical correction.

Continued on Pl. 30




10 cm

(Photos at various scales)

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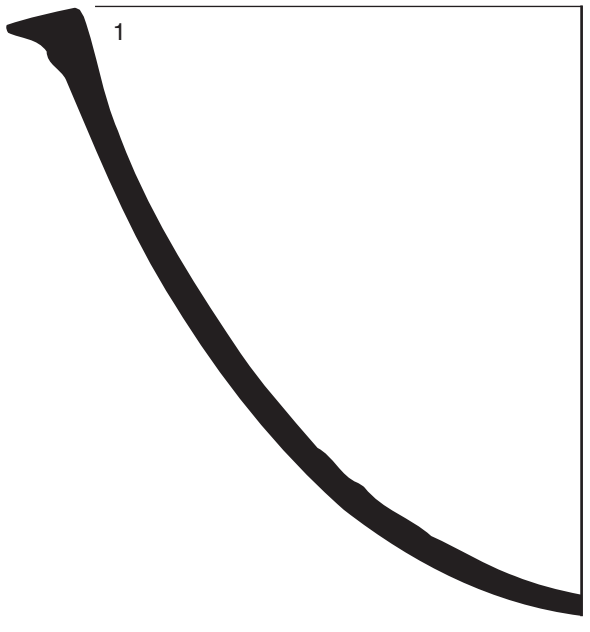
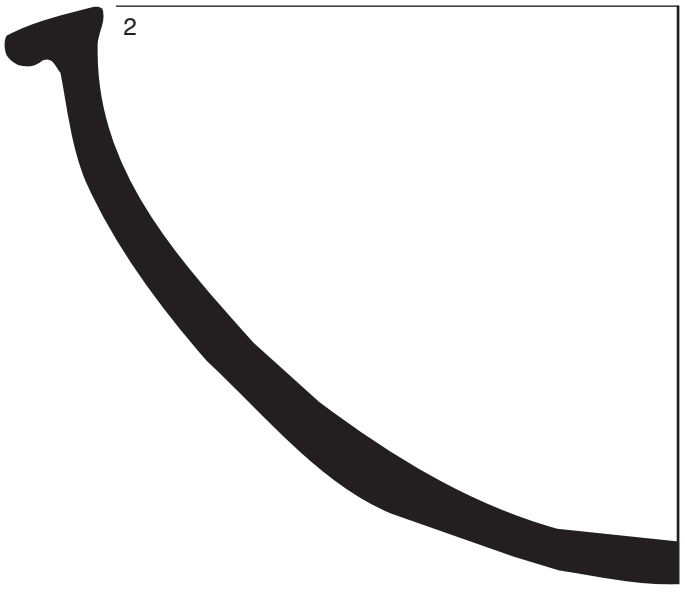
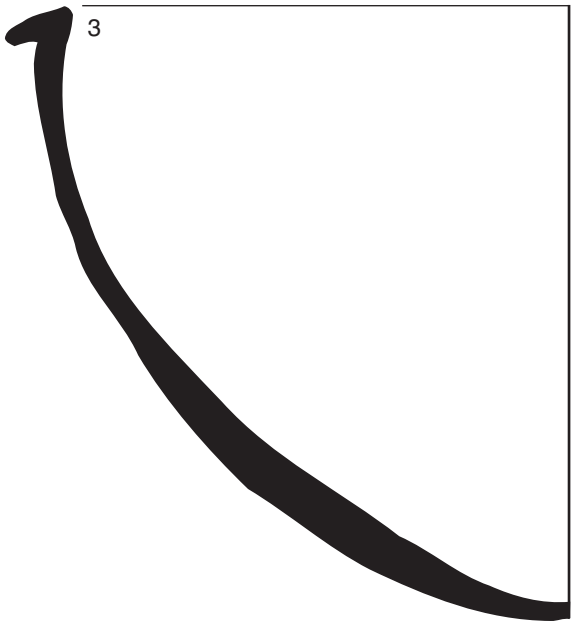
—1500

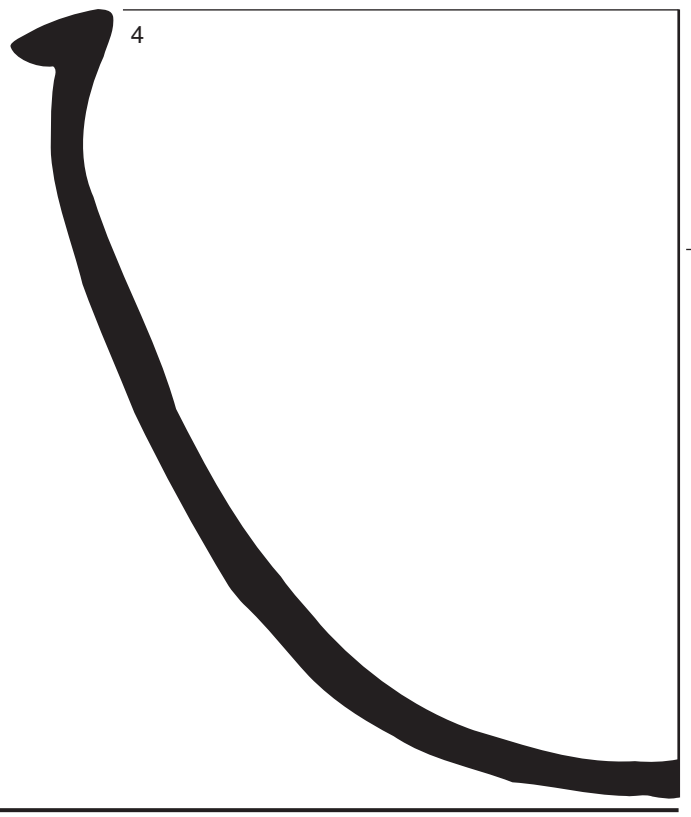
15 H 3

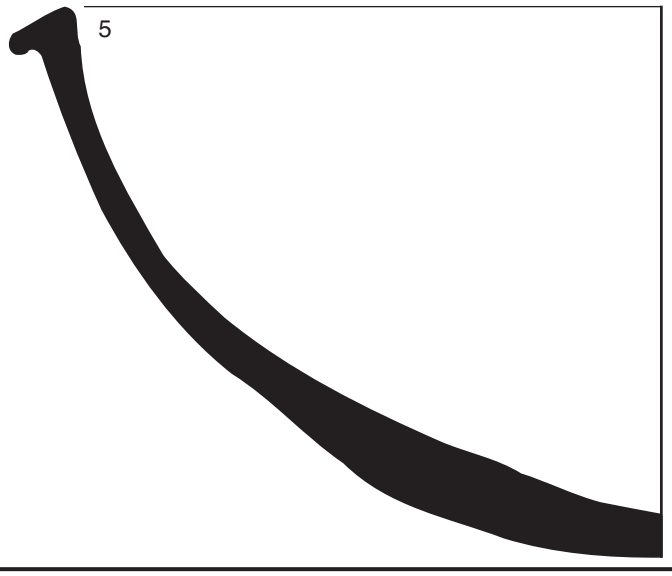



—1600




—1700

—1650

NORTHERN ALLUVIAL PLAIN

—1750

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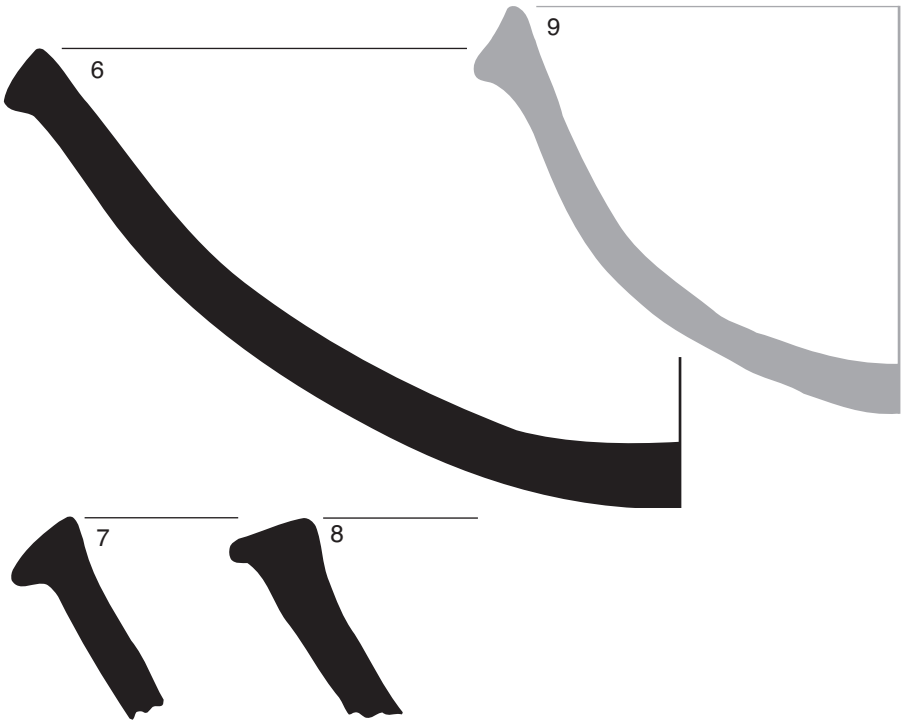


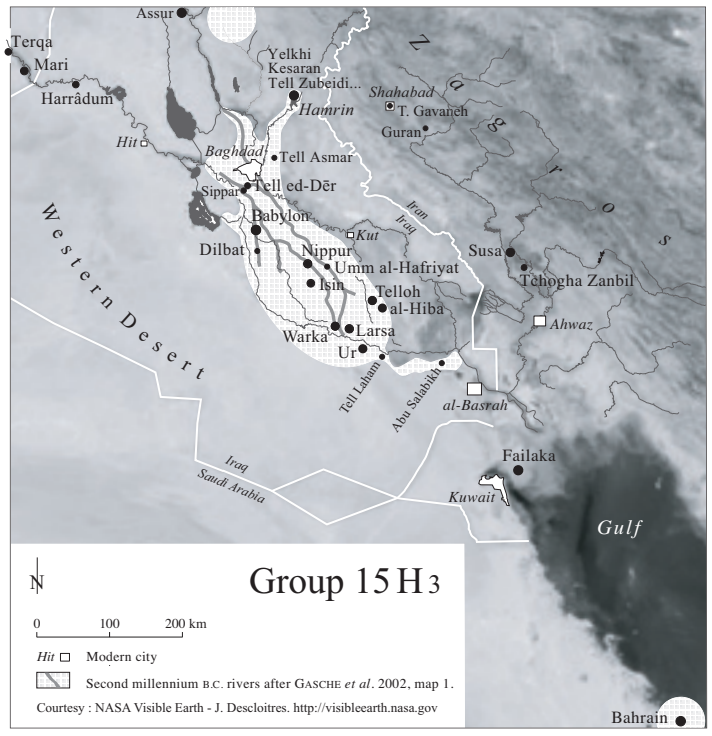



# PLATE 30

## 15 H 3

Continued from Pl. 29

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 103684 | E *sud* | Ib | 7.5YR 6/4 | ø rim : 305. Burial D.221 dug from Ib. |
| 2* | D | 105772 | E | VI | 5YR 6/6 | ø rim : 356. Burial D.323 dug from Ens VI. |
| 3* | D | 101883 | A | Ie | 5YR 7/4 | ø rim : 297. Burial D.69 probably dug from Ie. |
| 4* | D | 101925 | A | Ig | 5YR 5/8 | ø rim : 353. Burial D.45 dug from Ig. |
| 5* | D | 102942 | A | Ig | 7.5YR 6/4 | ø rim : 345. Burial D.200B dug from Ig. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 6 | I | IB 1592 | *NOA* III | 6,12m | 7.5YR 8/4 S : 2.5Y 8/2 | ø rim : 356. Burial 120. *Isin* 3, 74, Pl. 27 : 12. |
| 7 | N | A 2059 | WB | IV 3 | green | ø rim : -. |
| 8 | N | A 2059 | WB | IV 3 | buff | ø rim : -. |
| DIYALA | | | | | | |
| 9 | Yel | y 472 | - | IVb | - | ø rim : 224. GABUTTI 2002-03, Pl. 34 : 15. |




10 cm

(Photos at various scales)

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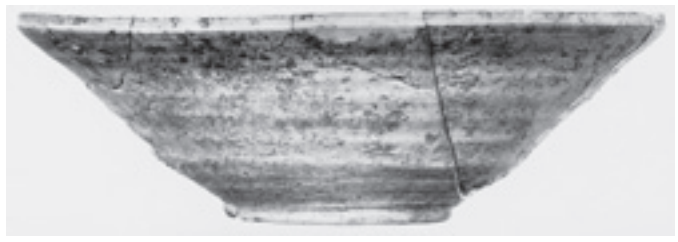
| 20 A | 20 B 1 | 20 B 2 |
|---|---|---|

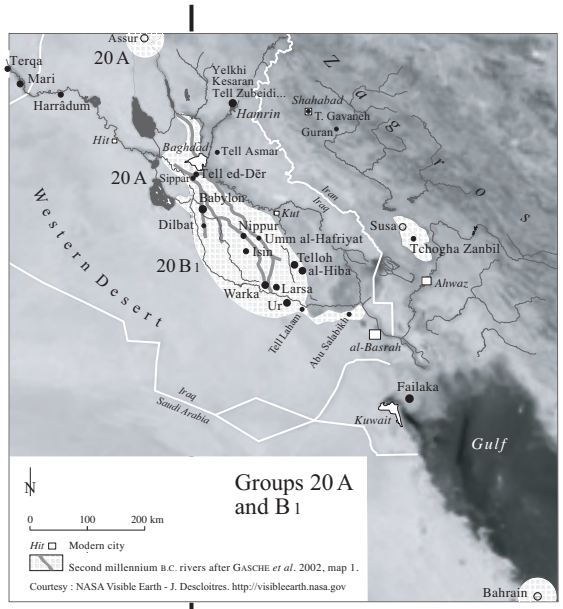
—1700



11

—1800

—1900




| N. A. P. | S. A. P. | N. A. P. |
|---|---|---|

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# PLATE 31

## 20 A

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 102991 | A | IIb | 10YR 7/3 | ø rim : 160. |
| 2* | D | 106981 | A | IIc | 7.5YR 8/4 | ø rim : ± 178. |
| 3* | D | 103769 | A | IIe | 2.5Y 8/2 | ø rim : 180. *TD* 4, Pl. 14 : 2. |
| 4* | D | 103566 | A | IIe | 10YR 7/4 | ø rim : 180. |

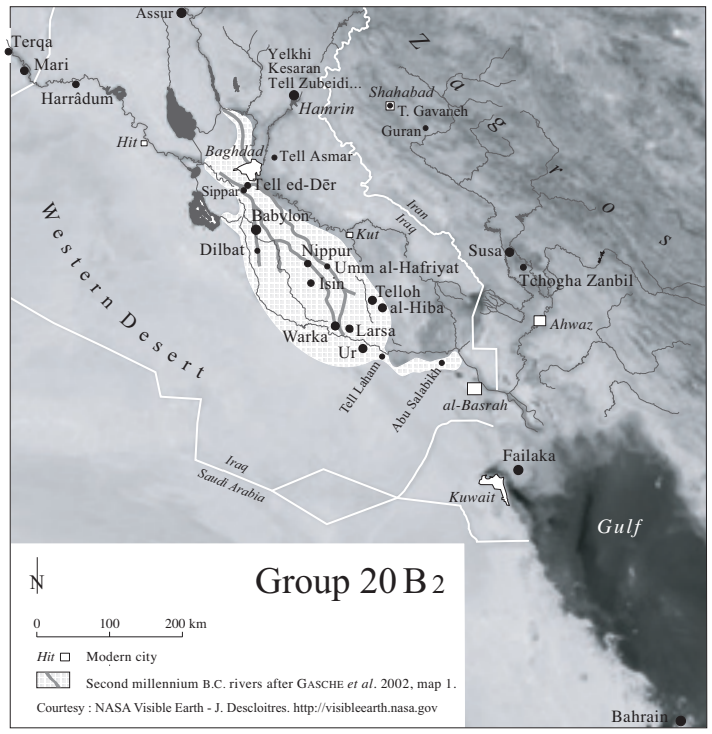
## 20 B 1

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 5 | I | IB 1250c | *SOA* | 6,88m to 6,98m | - | ø rim : 138. |
| 6 | I | 0177 | *SOA* | - | *rot* S : *hellgelb* | ø rim : 148. |
| 7 | N | B 583 | WA | V | reddish-buff | ø rim : 112. |
| 8 | N | 12 N 786 | WA | V | - | ø rim : 118. |
| 9 | N | 13 N 421 | WA | V | - | ø rim : 108. |
| 10 | U | 218 | A | II | pink | ø rim : -. |

## 20 B 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 11* | D | 103540 | A | Ii | 7.5YR 7/6 | ø rim : 175. Burial D.209C dug from Ii. |
| 12* | D | 103906 | A | IIc | 7.5YR 8/2 | ø rim : 178. Burial D.240B dug from IIc. *TD* 4, Pl. 21 : 7. |
| 13* | D | 103919 | A | IIc | 7.5YR 7/4 | ø rim : 177. Burial D.240B dug from IIc. *TD* 4, Pl. 21 : 5. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 14 | H | 1 HP 500 | B | - | - | ø rim : 188. |

C.P.U. = Chronological Position Uncertain

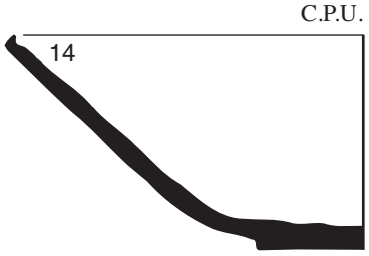



10 cm

(Photos at various scales)

20 B 2

C.P.U.




S. A. P.

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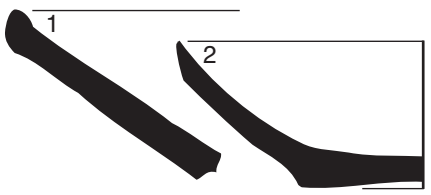
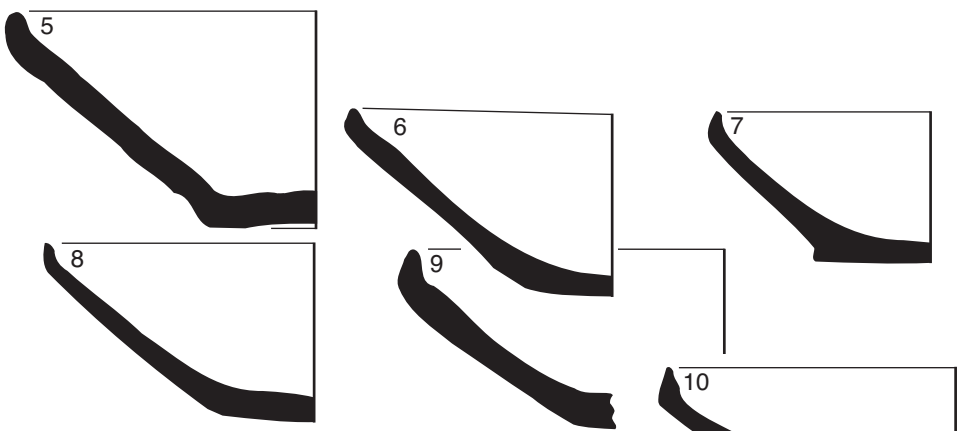
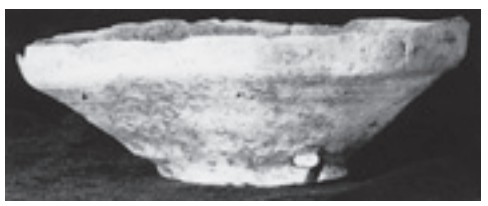
—1500

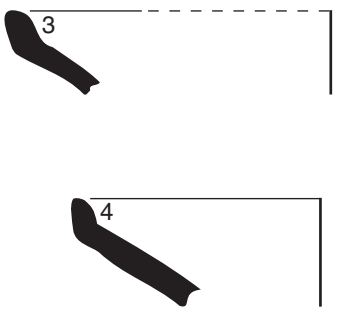
20 C 1

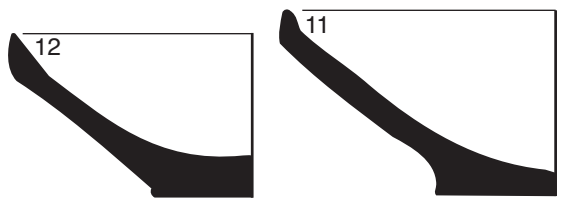



—1600

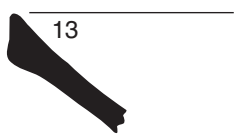


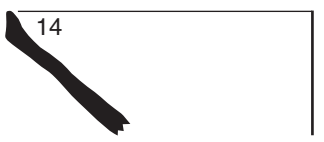




—1700




—1800

—1900




—2000

N. A. P.

SOUTHERN ALLUVIAL PLAIN

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# PLATE 32

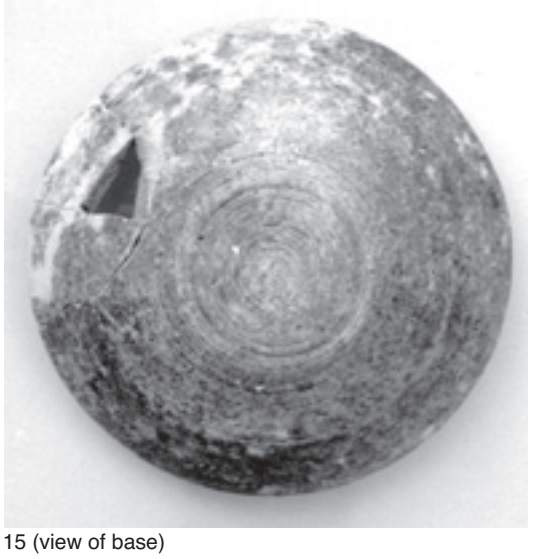
## 20 C 1

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 103169 | E *sud* | 0 | 7.5YR 6/4 | ø rim : -. Pit 2 dug from Ensemble 0. |
| 2* | D | 104439 | E | IIId | 5YR 6/4 | ø rim : 132. Burial D.276 dug from IIId. *MHEM* 1, Pls. 15 and 26 : 11. |
| 3* | D | 101575 | A | Ig | 2.5YR 6/6 | ø rim : ± 170. |
| 4* | D | 102720 | A | Ii | 7.5YR 7/4 | ø rim : 120. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 5* | L | 59.89 | *Mais*. 59 | - | 7.5YR 8/4 | ø rim : 162. Exc. Huot. Redrawn. |
| 6 | N | B 937 | WB | IV 2 | pinkish-buff | ø rim : 140. |
| 7 | N | 12 N 719 | WB | IV 2 | pink<br>S : cream | ø rim : 112. |
| 8 | N | 12 N 466 | WB | IV 1 | pinkish-buff | ø rim : 144. |
| 9 | N | B 182 | WB | IV 1 | pink | ø rim : 165. |
| 10 | N | 13 N 339 | WA | V | - | ø rim : 152. |
| 11 | N | A 108 | WA | V | grayish | ø rim : 144. |
| 12 | N | 12 N 779 | WA | V | red<br>S : pinkish | ø rim : 129. |
| 13 | N | B 554 | WA | VIA | reddish-buff | ø rim : -. |
| 14 | N | H 771 : 5 | WF | VIII | buff | ø rim : 144. *OIP* 129, Pl. 86 : 8 |
| MIDDLE EUPHRATES | | | | | | |
| 15* | M | III H2 NO28 | F | 0 | 10YR 7/4 | ø rim : 160. Burial III H2 NOT2. PONS 1999b, fig. 4 : 3. PONS 1999a, 119-120, Pl. 11 : 12 (No. 251478) = JEAN-MARIE 1999, 195, Pl. 244 : 2 (*tombe* 1085). |
| GULF | | | | | | |
| 16 | Fai | - | - | - | - | ø rim : 122. HØJLUND 1987, 77, fig. 296. Period 3B, see p. 109. |

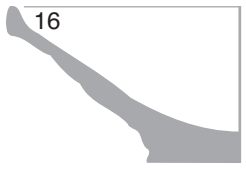
C.P.U. = Chronological Position Uncertain

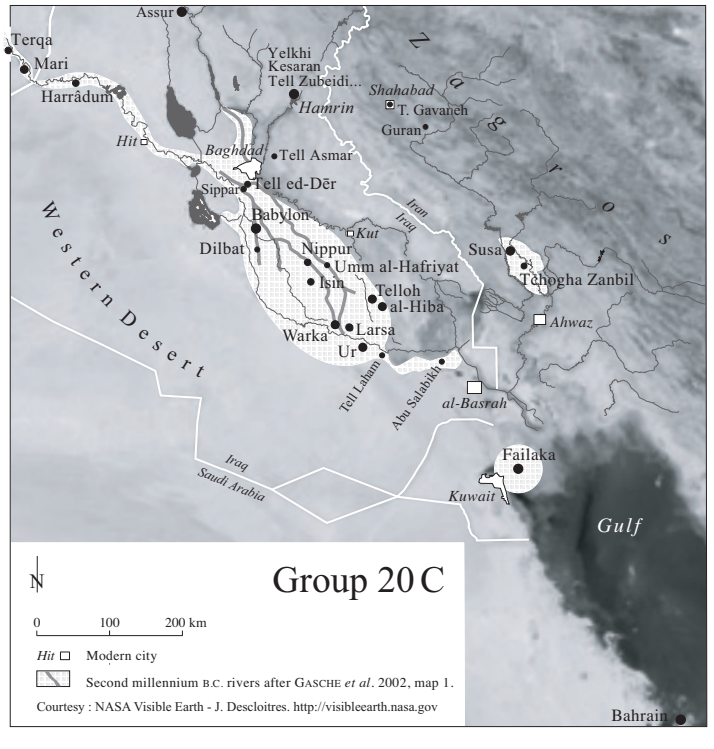
C.P.U.

15



15 (view of base)




10 cm

(Photos at various scales)

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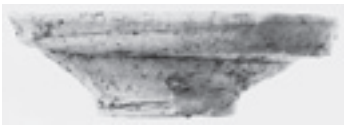
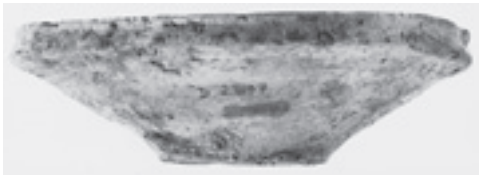
20 D 1

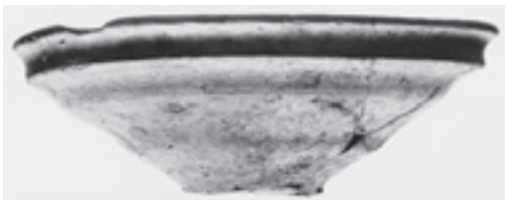
20 E 1

1


11

12


21


36

—1800

—1900

—2000

SOUTHERN ALLUVIAL PLAIN

NORTHERN ALLUVIAL PLAIN

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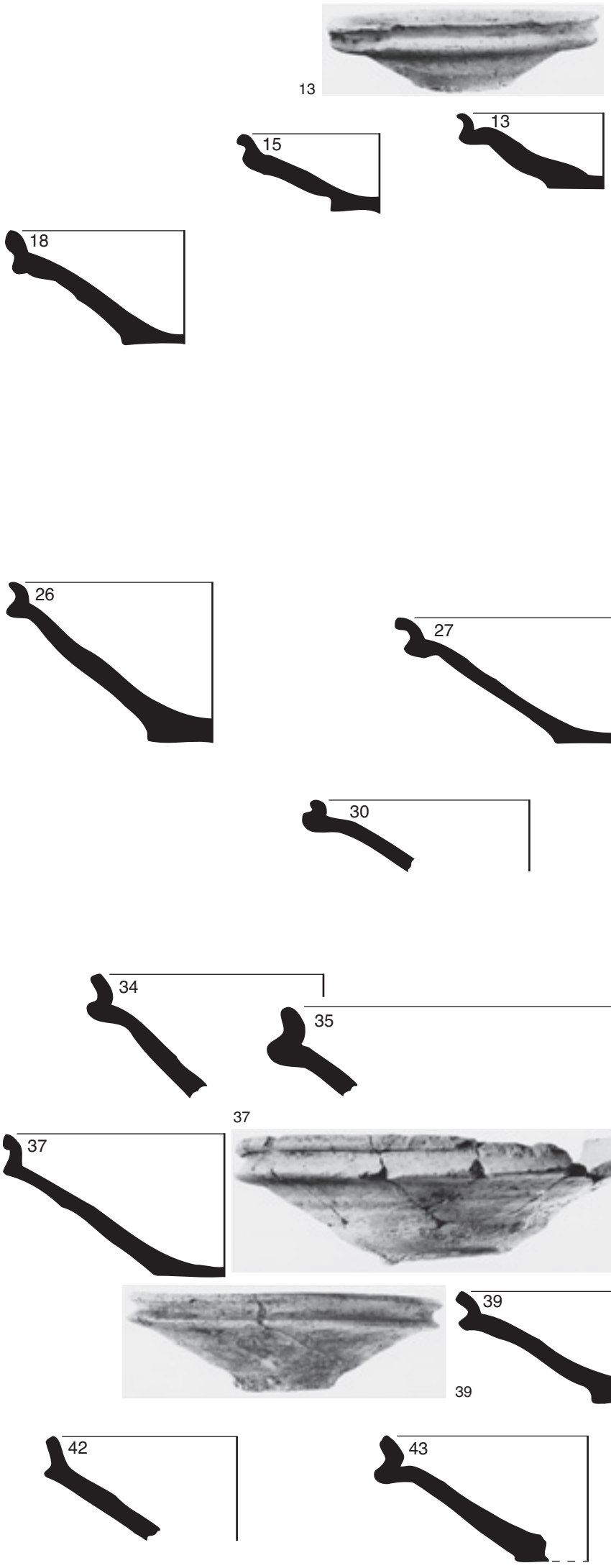
## 20 E 1



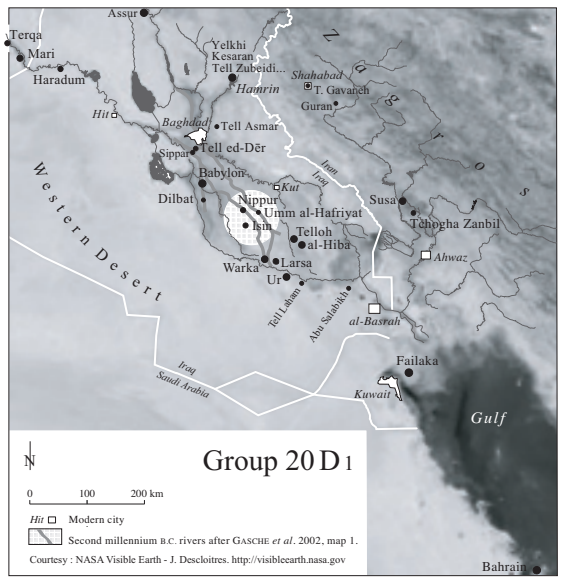

## 20 D 1

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | N | 12 N 383 | WA | VIA | light buff | ø rim : 132. Gibson 1978, fig. 8 : 7. Redrawn. |
| 2 | N | 13 N 401 | WA | VIA | - | ø rim : 144. |
| 3 | N | 13 N 402 | WA | VIA | - | ø rim : 164. |
| 4 | I | - | *WA* | - | *rötlich* S : *hellrot* | ø rim : 138. *Isin* 2, 84, 88, Pl. 32 : 47. |
| 5 | N | 12 N 703 | WA | VIA | reddish-buff | ø rim : 132. |
| 6 | N | B 660 | WA | VIA | buff | ø rim : 128. |
| 7 | N | 3P 16 | TB | IV 2 | buff | ø rim : 125. *OIP* 78, Pl. 82 : 18. |
| 8 | N | H 754 : 3 | WF | VIII | buff | ø rim : 132. *OIP* 129, Pl. 94 : 3. |
| 9 | N | 17 N 53 | WC-3 | VB | pinkish-buff | ø rim : 137. Burial 104 dug from VB. |
| 10 | N | 14 N 287 | WC-3 | VC | - | ø rim : 120. |

## 20 E 1

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 11* | D | 103705 | A | Ii | 2.5Y 8/2 | ø rim : 94. Burial D.232B dug from Ii. |
| 12* | D | 103704 | A | Ii | 2.5Y 8/2 | ø rim : 98. Burial D.232B dug from Ii. |
| 13 | D | 102280 | A | Ii | 10YR 7/3 | ø rim : 106. Burial D.149 dug from Ii. |
| 14* | D | 102681 | A | Ii | 5YR 6/6 | ø rim : 125. Burial D.177 dug from Ii. |
| 15* | D | 102391 | A | Ii | 2.5Y 7/2 | ø rim : 100. With foundation deposit. |
| 16 | D | 102281 | A | Ii | 5Y 7/3 | ø rim : 104. Burial D.149 dug from Ii. |
| 17* | D | 102392 | A | Ik | 2.5YR 6/6 | ø rim : 105. |
| 18* | D | 102363 | A | Ik | 5YR 7/6 | ø rim : 136. |
| 19* | D | 103534 | A | IIa | 7.5YR 6/4 | ø rim : 102. *TD* 4, Pl. 18 : 2. |
| 20* | D | 103793 | A | IIa | 7.5YR 7/4 | ø rim : 125. Burial D.238 dug from IIa. |
| 21* | D | 102697 | A | IIa | 5YR 5/6 | ø rim : 151. *TD* 4, Pl. 18 : 3. |
| 22* | D | 103901 | A | IIc | 2.5Y 8/2 | ø rim : 109. Burial D.240B dug from IIc. *TD* 4, Pl. 21 : 2. |
| 23* | D | 102941 | A | IIc | 5YR 6/4 | ø rim : 145. Burial D.204 dug from IIc. |
| 24* | D | 103789 | A | IIc | 5YR 6/6 | ø rim : 111. Burial D.241 dug from IIc. |
| 25* | D | 106988 | A | IIc | 7.5YR 6/4 | ø rim : 156. Pit 10 dug from IIc. |
| 26* | D | 102907 | A | IIc | 7.5YR 6/6 | ø rim : 148. |
| 27* | D | 104068 | A | IIc | 5YR 6/6 | ø rim : 162. Burial D.236 dug from IIc. |
| 28* | D | 102604 | A | IIe | 7.5YR 6/4 | ø rim : 160. *TD* 4, Pl. 14 : 1. |
| 29* | D | 104237 | A | IIg | 7.5YR 6/6 | ø rim : 160. *TD* 4, Pl. 13 : 3. |
| 30* | D | 104234 | A | IIf | 5Y 6/2 | ø rim : ± 160. |
| 31* | D | 104220 | A | IIIa | 7.5YR 6/6 | ø rim : 200. |
| 32* | D | 104218 | A | IIIb | 7.5YR 6/4 | ø rim : 160. |
| 33* | D | 104209 | A | IIIb | 5YR 6/6 | ø rim : 160. |
| 34* | D | 104244 | A | IIIb | 7.5YR 6/4 | ø rim : 170. Pit 14 dug from IIIb. |
| 35* | D | 104222 | A | IIIb | 10YR 7/4 | ø rim : 275. *TD* 4, Pl. 12 : 4. |
| 36* | D | 100996 | A | IIIb | 5YR 6/6 | ø rim : 147. |
| 37* | D | 100997 | A | IIIb | 10YR 7/3 | ø rim : 160. |
| 38* | D | 104137 | A | IIId | 5YR 7/4 | ø rim : 150. Burial D.269 dug from IIId. *TD* 4, Pl. 10 : 2. |
| 39* | D | 102560 | A | IIId | 5YR 6/4 | ø rim : 145. |
| 40* | D | 104207 | A | IVb | 10YR 7/3 | ø rim : 150. *TD* 4, Pl. 8 : 3. |
| 41* | D | 104269 | A | IVb | 5YR 6/4 | ø rim : 200. *TD* 4, Pl. 8 : 5. |
| 42* | D | 104232 | A | IVb | 7.5YR 6/4 | ø rim : 140. *TD* 4, Pl. 8 : 4. |
| 43* | D | 104249 | A | IVb | 7.5YR 6/4 | ø rim : 150. *TD* 4, Pl. 8 : 6. |

Continued on Pl. 34




10 cm

(Photos at various scales)

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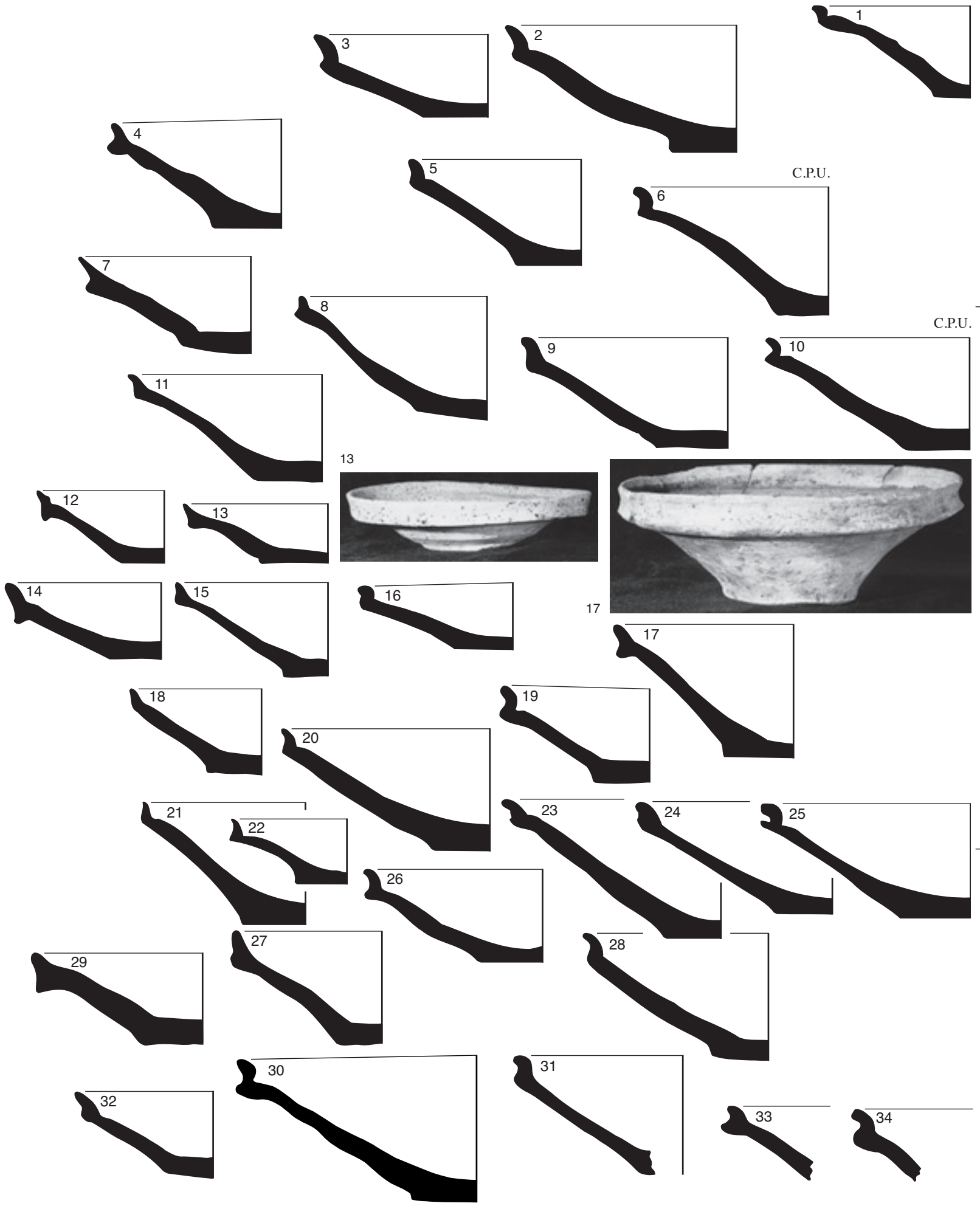


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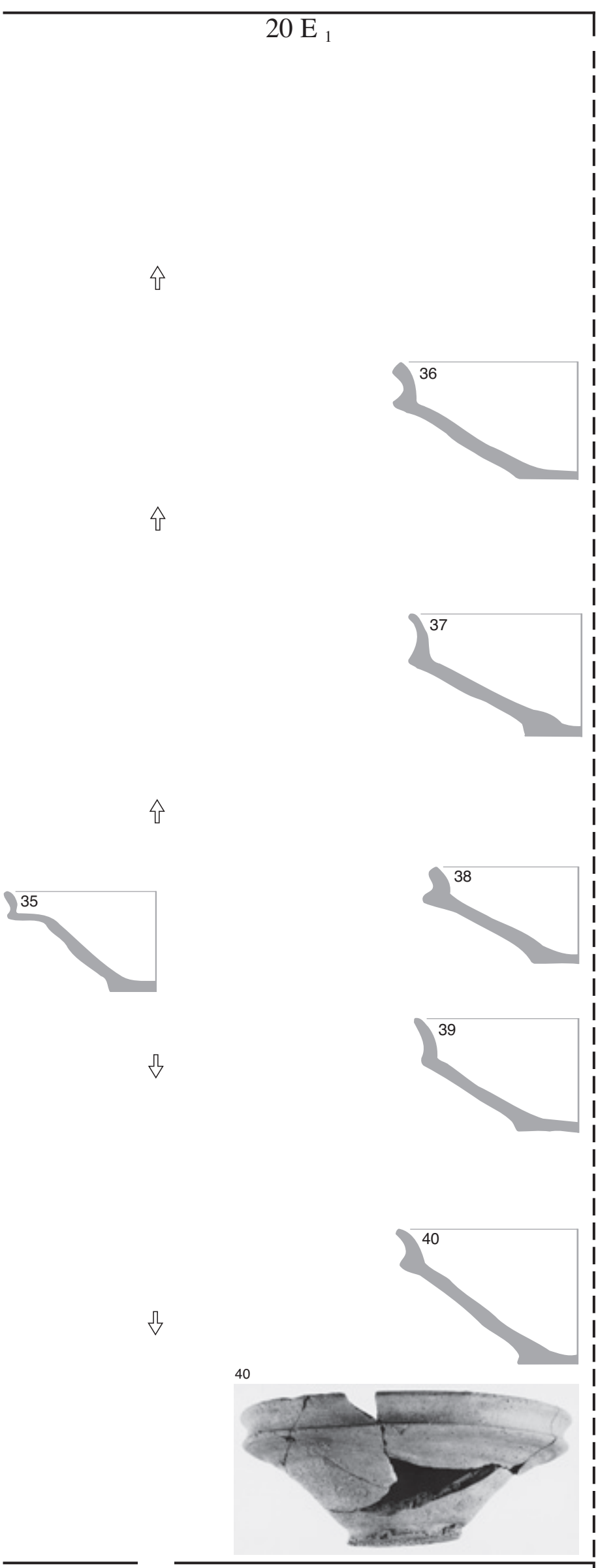
20 E 1



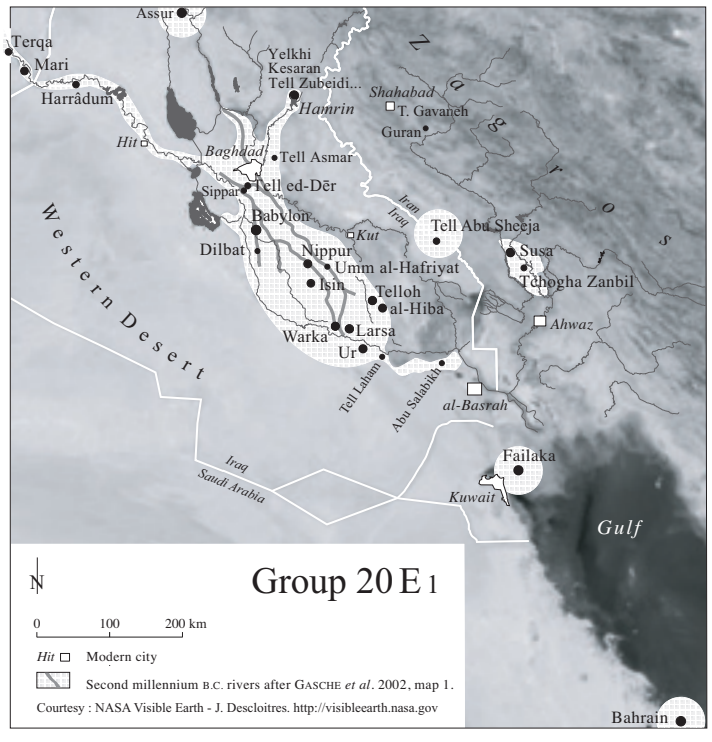

# PLATE 34

20 E 1

Continued from Pl. 33

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | N | B 588 | WA | V | reddish-buff | ø rim : 136. |
| 2 | I | 0246 | *SOA* | 6,60m | *rot* | ø rim : 200. |
| 3 | I | 0245 | *SOA* | 5,83m | - | ø rim : 150. Burial 156. |
| 4 | U | 1 UmH 12 | A | Surface | 7.5YR 7/4 | ø rim : 144. |
| 5 | I | 0244 | *SOA* | 5,83m | - | ø rim : 150. Burial 156. |
| 6 | L | L. 416 | - | - | 10YR 8/2 | ø rim : 166. Exc. Parrot, 1933. Louvre, AO 17005. Drawn at the Louvre. PARDO 1979, Pl. 11. |
| 7 | N | 13 N 366 | WA | VIA | - | ø rim : 148. |
| 8 | N | 13 N 365 | WA | VIA | - | ø rim : 162. |
| 9 | N | 12 N 707 | WA | VIA | reddish-buff S : cream | ø rim : 178. |
| 10 | L | L. 415 | - | - | 10YR 8/3 | ø rim : 176. Exc. Parrot, 1933. Louvre, AO 17004. Drawn at the Louvre. |
| 11 | N | 12 N 702 | WA | VIA | buff | ø rim : 168. |
| 12 | N | B 714 | WA | VIA | reddish-buff | ø rim : 109. |
| 13 | N | 12 N 697 | WA | VIA | buff | ø rim : 126. |
| 14 | N | B 626 | WA | VIA | reddish-buff | ø rim : 134. |
| 15 | N | 13 N 558 | WA | VIA | - | ø rim : 131. |
| 16 | U | 1 UmH 210 | A | II | 10YR 8/3 | ø rim : 132. Burial 18 dug from II. |
| 17 | N | 12 N 641 | WA | VIA | buff | ø rim : 154. |
| 18 | N | 14 N 340 | WC-3 | IV | - | ø rim : 113. Burial 65 dug from IV. |
| 19 | N | 14 N 339 | WC-3 | IV | - | ø rim : 128. Burial 65 dug from IV. |
| 20 | H | 5 H 20g | B | - | - | ø rim : 182. Burial 5HB 9. |
| 21 | H | 5 H 20b | B | - | 5YR 6/4 | ø rim : 140. Burial 5HB 9. |
| 22 | H | 5 H 19c | B | - | 5YR 6/4 | ø rim : 100. Burial 5HB 9. |
| 23 | H | 5 H 20f | B | - | 5YR 6/4 | ø rim : 190. Burial 5HB 9. |
| 24 | H | 5 H 20a | B | - | 5YR 6/4 | ø rim : 168. Burial 5HB 9. |
| 25 | H | 5 H 20c | B | - | 5YR 6/4 | ø rim : 178. Burial 5HB 9. |
| 26 | W | 19789f | Sînkāšid | 1 | - | ø rim : 156. Burial 34, under Room 5 of the palace. *AUWE* 10, Pl. 17 : Grab 34f = VAN ESS 1988a, fig. 3 : 39. |
| 27 | N | 14 N 378 | WC-3 | VB | - | ø rim : 130. Burial 78 dug from VB. |
| 28 | N | B 565 | WA | VIB | reddish-buff | ø rim : 161. |
| 29 | N | 14 N 377 | WC-3 | VB | - | ø rim : 149. Burial 78 dug from VB. |
| 30 | N | 17 N 74 | WC-3 | VB | greenish-buff | ø rim : 208. Burial 104 dug from VB. |
| 31 | N | D 603 | WC-3 | VC | buff | ø rim : 145. |
| 32 | N | D 664 | WC-3 | VC | buff | ø rim : 120. |
| 33 | N | D 664 | WC-3 | VC | pink | ø rim : -. |
| 34 | N | D 603 | WC-3 | VC | pink | ø rim : -. |
| DIYALA | | | | | | |
| 35 | As | As. 30 : P. 1a | O 29 : 5 | - | - | ø rim : 124. See *OIP* 63, Pl. 150 : B.151.210 (Larsa) |
| SUSIANA | | | | | | |
| 36 | S | GS-7092 | B | V | *brune* | ø rim : 148. *MDP* 47, Pl. 7 : 15. |
| 37 | S | GS-7091 | B | V | *jaunâtre* | ø rim : 140. *MDP* 47, Pl. 7 : 1. |
| 38 | S | GS-7078 | B | VI | *brune* | ø rim : 120. *MDP* 47, Pl. 7 : 18. |
| 39 | S | GS-7079 | B | VI | *brune* | ø rim : 132. *MDP* 47, Pl. 7 : 2. |
| 40 | S | GS-7056 | B | VII | *brune* | ø rim : 147. *MDP* 47, Pls. 7 : 8 and 59 : 1. |

C.P.U. = Chronological Position Uncertain




10 cm

(Photos at various scales)

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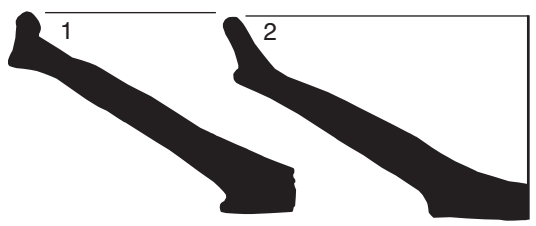
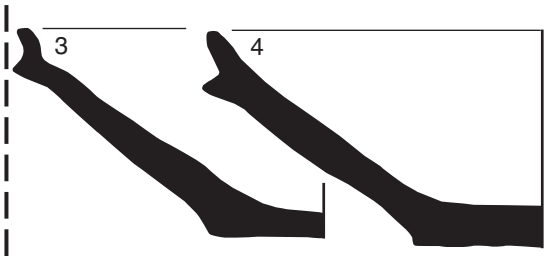
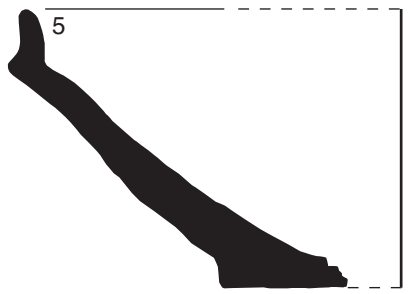
—1500

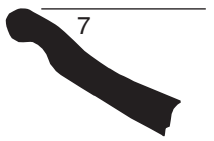
20 F 1

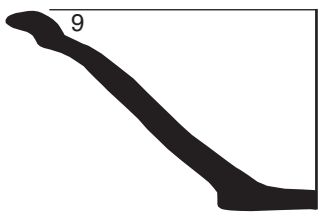
20 G 1

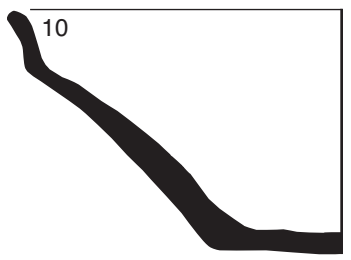


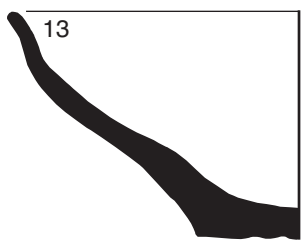



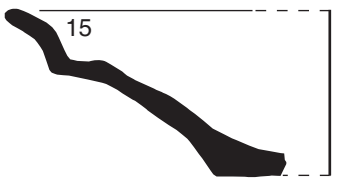


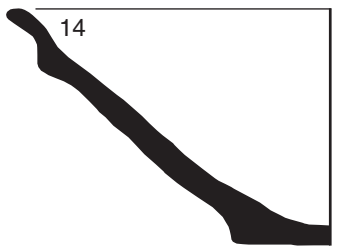


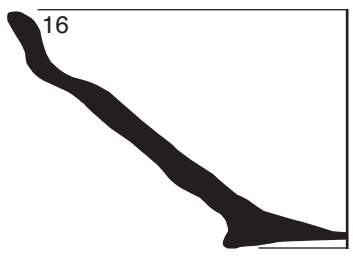



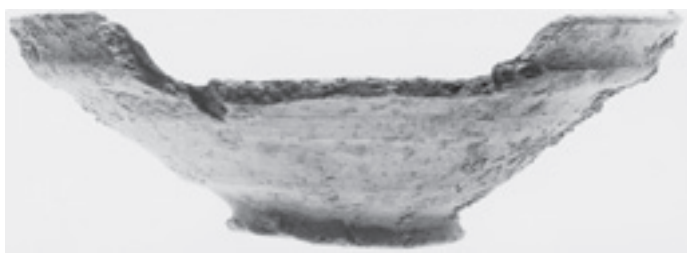

—1600



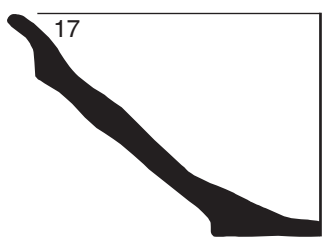



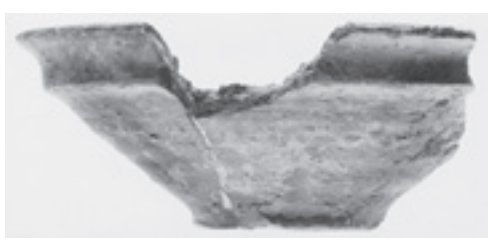



16



17

N. A. P.

NORTHERN ALLUVIAL PLAIN

—1700

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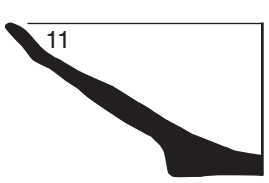
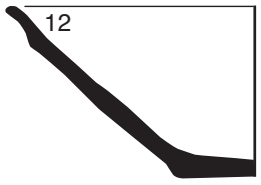
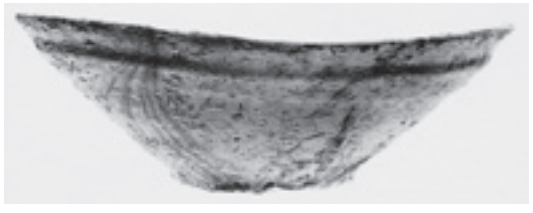


12

NORTHERN ALLUVIAL PLAIN

# PLATE 35

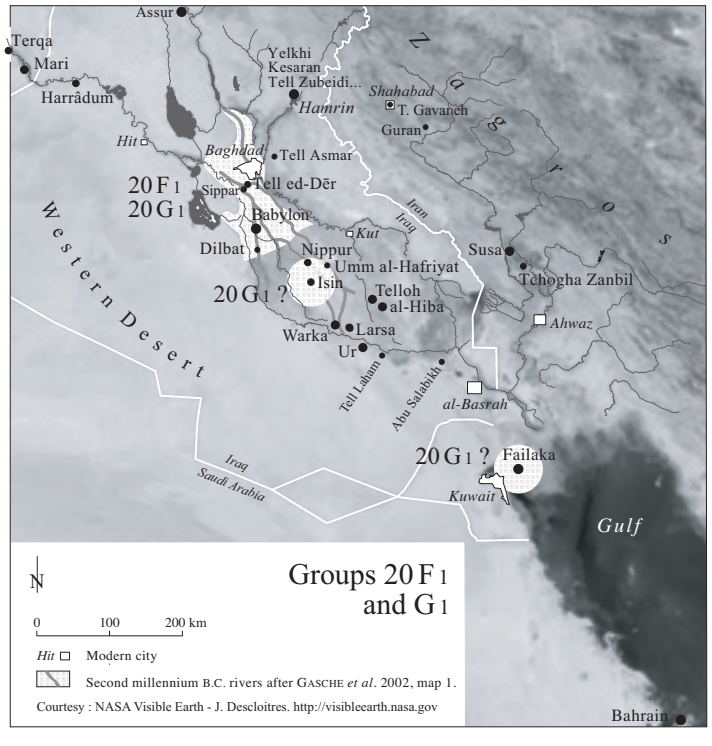
## 20 F 1

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 103670 | E | IIIe | 10YR 8/3 | ø rim : -. |
| 2* | D | 109508 | E | IIIe | 5YR 6/5 | ø rim : 160. |
| 3* | D | 101303 | A | Ia | 5YR 6/4 | ø rim : 160. *TD* 2, Pl. 18 : 9. |
| 4* | D | 101750 | A | Ia | 7.5YR 6/4 | ø rim : 175. *TD* 2, Pl. 18 : 10. |
| 5* | D | 100404 | A | Ic[1)] | 10YR 3/4 S : 2.5Y 8/2 | ø rim : ± 200. *TD* 1, Pl. 12 : 3. |

## 20 G 1

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 6* | D | 103989 | E | IIIa | 7.5YR 7/4 | ø rim : 204. |
| 7* | D | 106978 | E | IIIa | 7.5YR 6/4 | ø rim : -. |
| 8* | D | 103923 | E | IIIb | 7.5YR 7/4 | ø rim : 200. Burial D.249 probably dug from IIIb. *MHEM* 1, Pls. 23 and 26 : 12. |
| 9* | D | 106980 | E | IIId | 7.5YR 6.5/4 | ø rim : 162. |
| 10* | D | 101347 | A | 0 | 7.5YR 7/4 | ø rim : 174. Pit 1 (cf. *TD* 2, Plan 6) now attributed to Ensemble 0. |
| 11* | D | 101346 | A | 0 | 7.5YR 6/4 | ø rim : 140. Pit 1 (cf. *TD* 2, Plan 6) now attributed to Ensemble 0. |
| 12* | D | 101277 | A | Ic | 7.5YR 7/4 | ø rim : 139. |
| 13* | D | 100394 | A | Ic[1)] | 7.5YR 7/4 S : 10YR 8/3 | ø rim : 152. *TD* 1, Pl. 11 : 5. |
| 14* | D | 101239 | A | Ic | 5YR 6/6 | ø rim : 170. *TD* 2, Pl. 18 : 7. |
| 15* | D | 101268 | A | Ic | 5Y 8/2 | ø rim : ± 171. *TD* 2, Pl. 18 : 8. |
| 16* | D | 101274 | A | Ic | 7.5YR 6/4 | ø rim : 179. *TD* 2, Pl. 18 : 6. |
| 17* | D | 101286 | A | Ic | 7.5YR 6/4 | ø rim : 162. |

1) See *TD* 2, 38 for the stratigraphical correction.




10 cm

(Photos at various scales)

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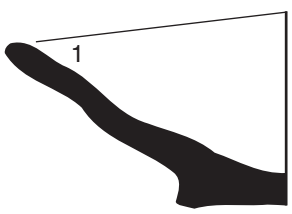
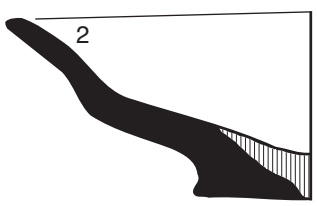
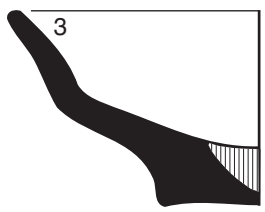
—1200

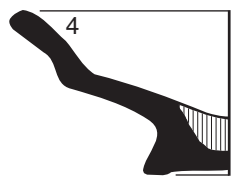
20 H 1



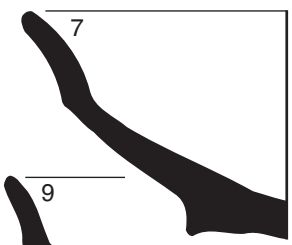



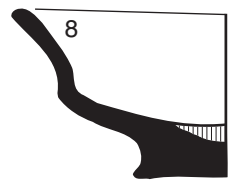



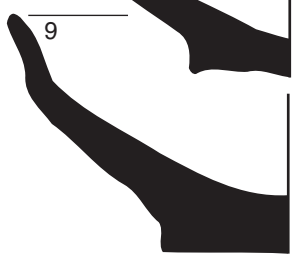
4

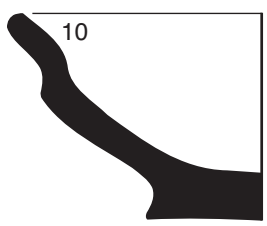


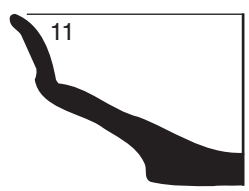
10

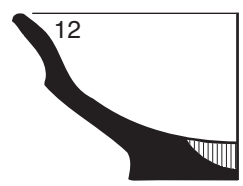


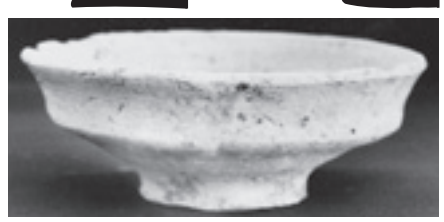

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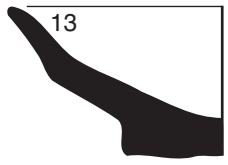
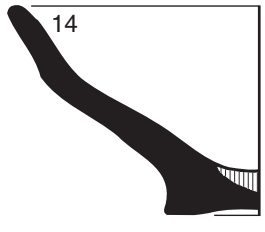
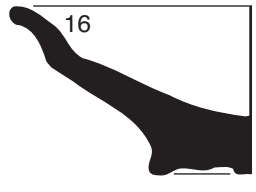
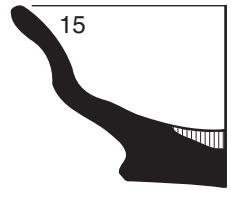
—1300

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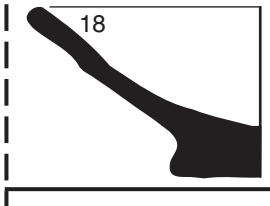


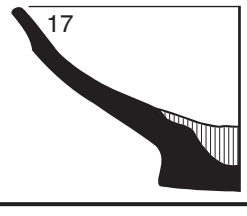


—1450

NORTHERN ALLUVIAL PLAIN

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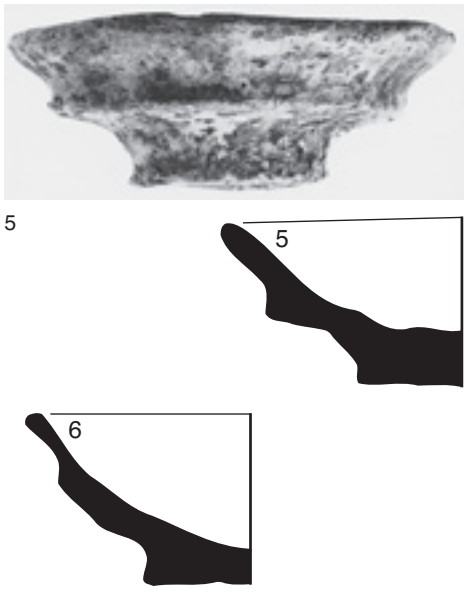


## 20 H 1

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | Dey | A 54.5 | B | I | 2.5Y 8/2 | ø rim : 148. |
| 2* | D | 107546 | E3 | 0 | 2.5Y 8/2 | ø rim : 160. Filled-in base. Height : 46-52 mm. |
| 3* | D | 106908 | E3 | 0 | 2.5Y 8/2 | ø rim : 130. Filled-in base. Pit 1 dug from Ensemble 0. *NAPR* 6, Pl. 9 : 6. |
| 4* | D | 106905 | E3 | 0 | 7.5YR 8/4 | ø rim : 114. Filled-in base. Pit 1 dug from Ensemble 0. |
| 5 | D | 107279 | E3 | 0 | 2.5Y 6/4 | ø rim : 126. See Burial D.337B dug from Ensemble 0. |
| 6* | D | 103049 | E | 0 | 10YR 7/4 | ø rim : 130. Pit 1 dug from Ensemble 0. |
| 7* | D | 107250 | E2 | 0 | 10YR 7/4 | ø rim : 138. |
| 8* | D | 107576 | E3 | 0 | 2.5Y 8/2 | ø rim : 112. Filled-in base. Pit 1 dug from Ensemble 0. |
| 9 | Dey | A 75.1 | B | I | 7.5YR 5/6 | ø rim : 150. |
| 10 | D | 107288 | E3 | 0 | 10YR 6/3 | ø rim : 135. Burial D.337B dug from Ens. 0. GASCHE 1991, 27, fig. 5 : 1. |
| 11 | Dey | 1 D 18 | B | I | 7.5YR 6/6 | ø rim : 122. Burial 4 dug from I. |
| 12* | D | 107543 | E3 | 0 | 7.5YR 8/4 | ø rim : 118. Filled-in base. |
| 13* | D | 107360 | E3 | Ia2 | 5Y 7/2 S : 10YR 8/3 | ø rim : 115. |
| 14* | D | 105655 | E3 | Ic1 | 10YR 8/3 | ø rim : 131. Filled-in base. Burial D.374A dug from Ic, probably Sub-Phase 1. *NAPR* 6, Pl. 7 : 11. |
| 15* | D | 109409 | E3 | Ic | 7.5YR 8/4 | ø rim : 112. Filled-in base. *NAPR* 6, Pl. 7 : 15. |
| 16* | D | 107390 | E3 | Ic1 | 7.5YR 6/4 | ø rim : 133. *NAPR* 6, Pl. 7 : 14. |
| 17* | D | 109404 | E3 | II | 7.5YR 7/4 | ø rim : 118. Filled-in base. *NAPR* 6, Pl. 7 : 8. |
| 18* | D | 103846 | E | II | 10YR 8/3 | ø rim : 122. |

Continued on Pl. 37

10 cm

(Photos at various scales)

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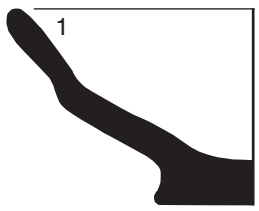
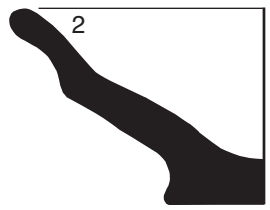
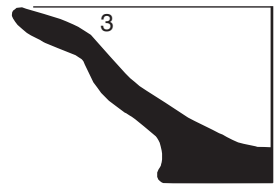
—1000



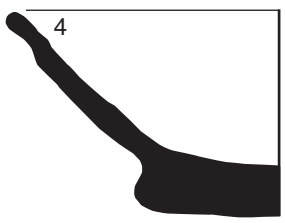



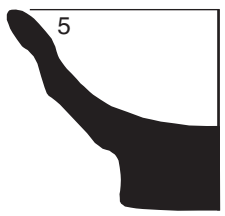



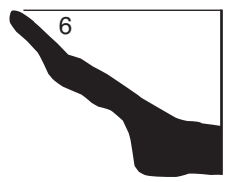

—1100

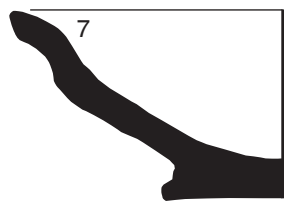
—1200

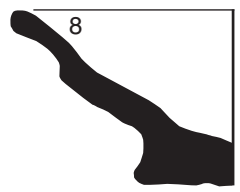
8

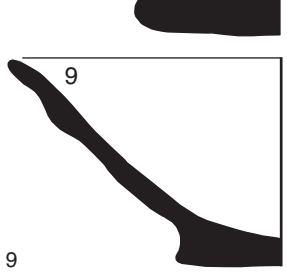


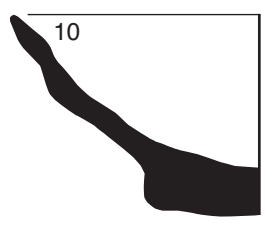



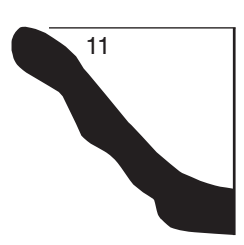



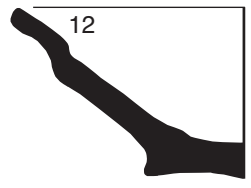

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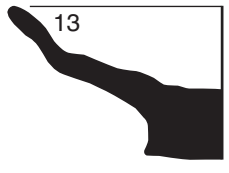


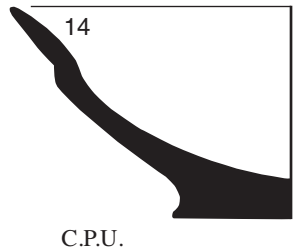


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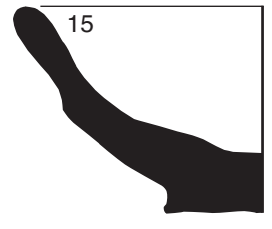


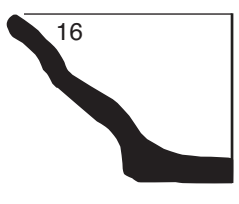


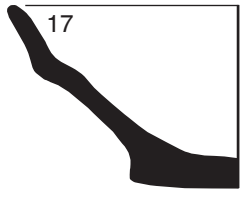


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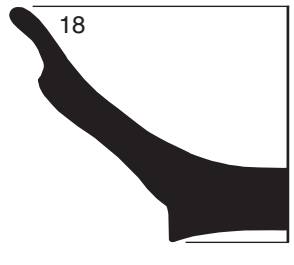


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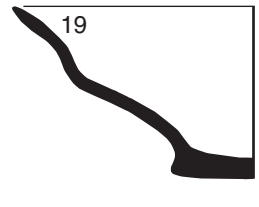


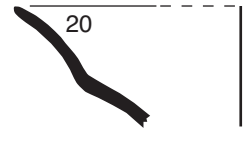


—1400

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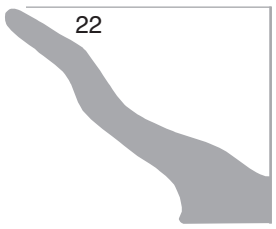
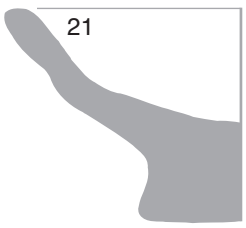
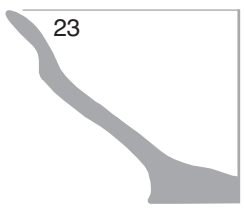
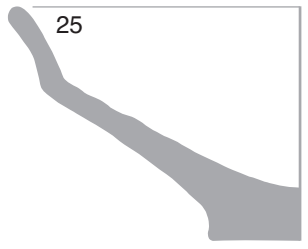





M. E. DIYALA GULF

# PLATE 37

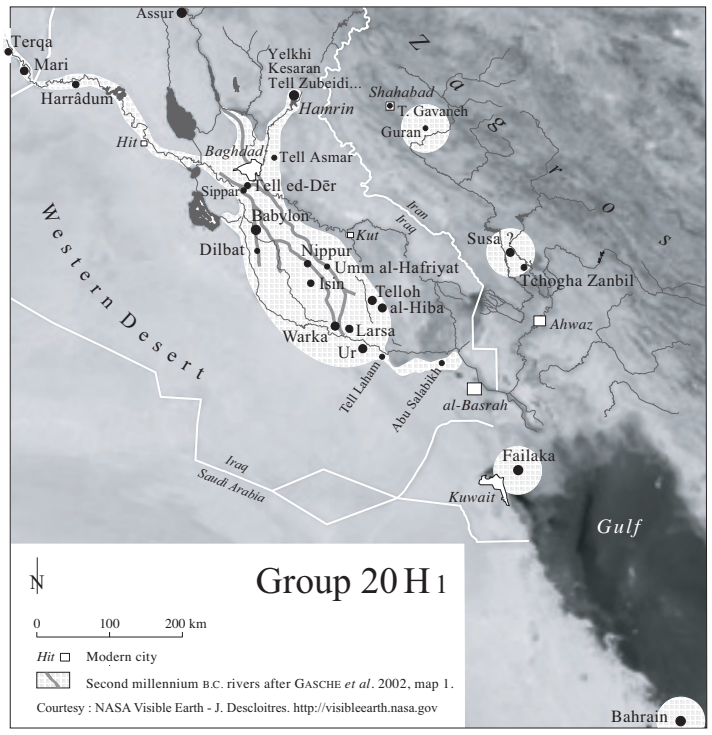
## 20 H 1

Continued from Pl. 36

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | I | 0066 | *NA* II | 7,84m | *hellbraun* S : *hellgrünlich* | ø rim : 130. |
| 2 | I | IB 982 | *NA* II | 7,84m | - | ø rim : 132. *Isin* 2, 87, Pl. 31 : 27. |
| 3 | I | 0064 | *NA* II | 7,84m | *hellbraun* S : *hellgrünlich* | ø rim : 136. *Isin* 2, 87, Pl. 31 : 29. |
| 4 | N | C 510 | WC-1 | II | orange | ø rim : 145. *OIP* 111, Pl. 74 : k. |
| 5 | N | 13 N 403 | WC-1 | II | - | ø rim : 112. *OIP* 111, Pl. 74 : b. |
| 6 | N | 14 N 310 | WC-1 | II | - | ø rim : 112. *OIP* 111, Pl. 74 : a. |
| 7 | N | D 78 | WC-1 | II | - | ø rim : 141. *OIP* 111, Pl. 74 : i. |
| 8 | N | 14 N 64 | WC-1 | II | - | ø rim : 115. *OIP* 111, Pl. 74 : d. |
| 9 | N | 13 N 291 | WB | II | - | ø rim : 145. |
| 10 | N | 13 N 512 | WC-1 | III-II [1)] | - | ø rim : 132. *OIP* 111, Pl. 73 : m. |
| 11 | N | C 508 + 531 | WC-1 | III-II [1)] | orange S : cream | ø rim : 117. *OIP* 111, Pl. 73 : g. |
| 12 | N | 14 N 307 | WC-1 | III | - | ø rim : 122. *OIP* 111, Pl. 72 : m. |
| 13 | N | 14 N 357 | WC-1 | III | - | ø rim : 112. *OIP* 111, Pl. 72 : j. |
| 14 | I | 0033 | *NA* III | (*Tiefschn. Hof 4*) | *dunkelgelbl.* S : *hellgelb* | ø rim : 148. |
| 15 | L | L. 209 | - | - | 2.5Y 8/3 | ø rim : 128. Exc. Parrot, 1933. Louvre, AO 17009. Drawn at the Louvre. PARDO 1979, Pl. 12. |
| 16 | N | D 706 | WC-1 | III | buff S : cream | ø rim : 118. *OIP* 111, Pl. 72 : e. |
| 17 | N | D 57 | WC-1 | III | buff S : cream | ø rim : 123. *OIP* 111, Pl. 72 : g. |
| 18 | L | - | *F.S.* | -2.30 m | - | ø rim : 145. Exc. Parrot, 1967. PARROT 1968, fig. 14 : center, right. |
| 19 | N | C 1468 | WB | III | - | ø rim : 126. |
| 20 | N | C 1468 | WB | III | buff | ø rim : ± 120. |
| MIDDLE EUPHRATES | | | | | | |
| 21 | M | 87 E III B 21-11 | E | C0 c+ | - | ø rim : 122. PONS and GASCHE 1996, fig. 1 : 5. |
| DIYALA | | | | | | |
| 22 | Zub | 79/90 | - | I | *rötlich* | ø rim : 140. *BaF* 7, 46, 47, Pl. 115 : 162. |
| 23 | Yel | HY 10 | A | Ic | *cuoio* | ø rim : 122. VALTZ 2002-03, Pl. 142 : 23. |
| GULF | | | | | | |
| 24 | Bah | - | Exc. 428 | 8 | - | ø rim : 120. HØJLUND 1987, fig. 699. Period IIIB = IIIb 2 (see HØJLUND and ANDERSEN 1997, 61). |
| 25 | Bah | - | Exc. 519 Bldg. I | between 5.00 & 6.00 | - | ø rim : -. HØJLUND and ANDERSEN 1997, fig. 211. Period IIIb 1. |

1) From a pit between Levels III and II.

C.P.U. = Chronological Position Uncertain




10 cm

(Photos at various scales)

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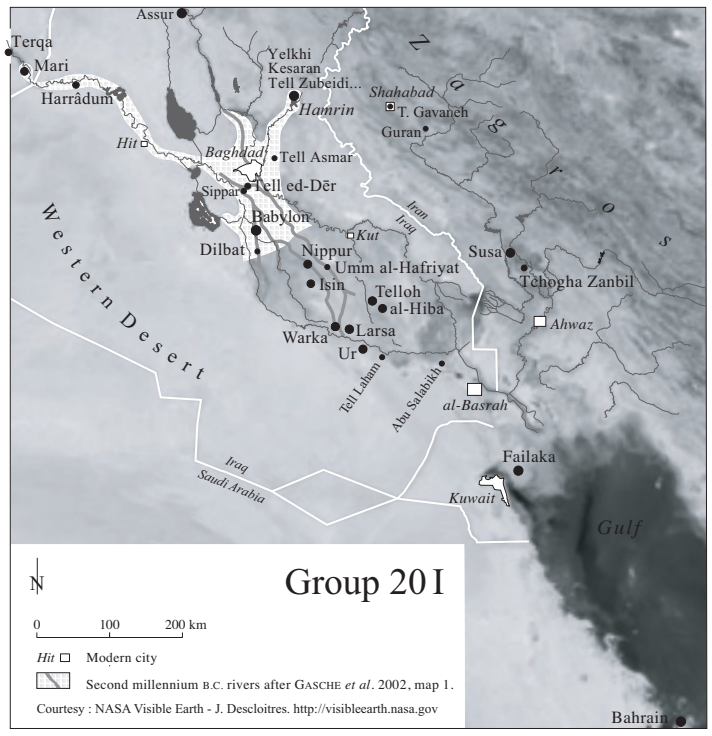
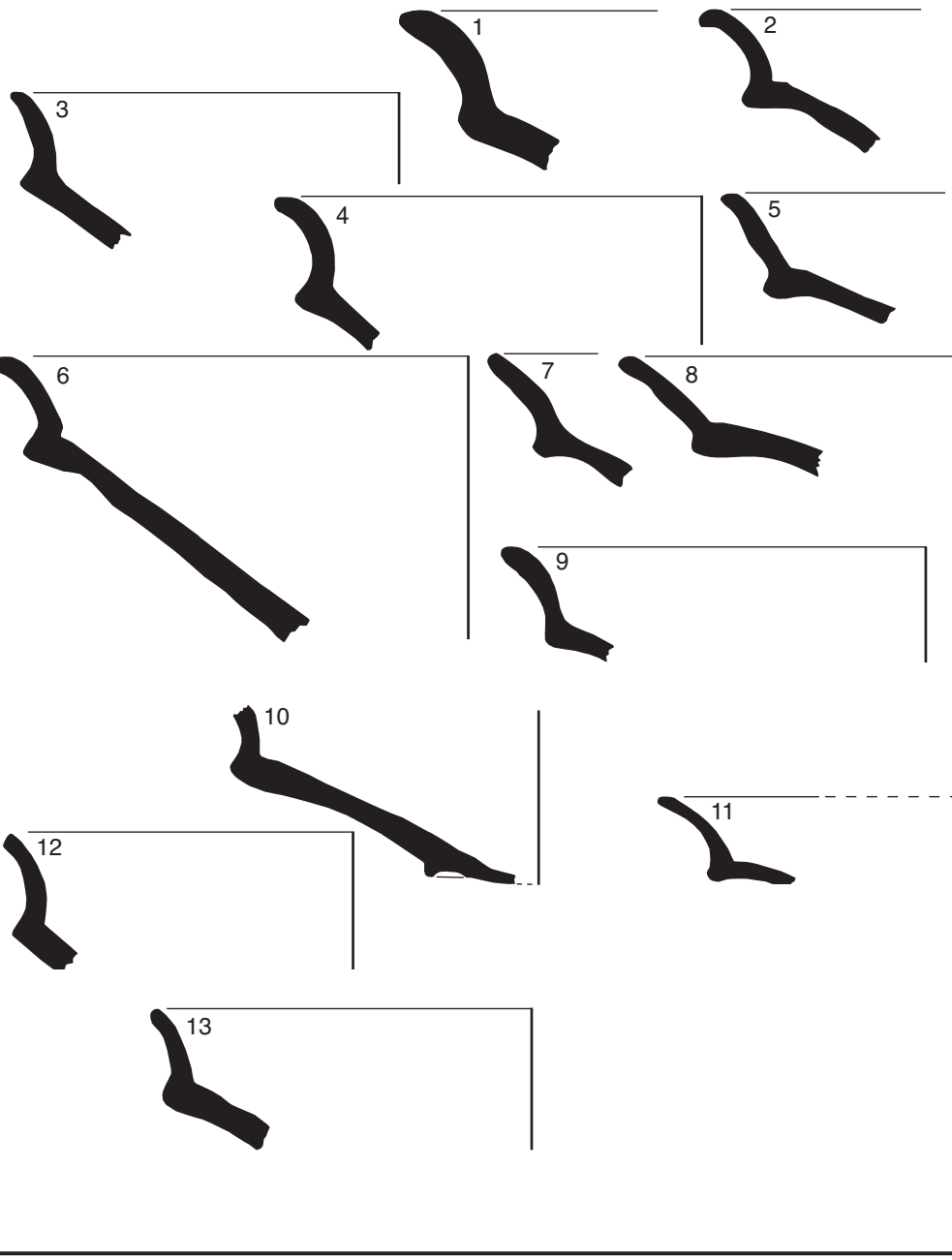
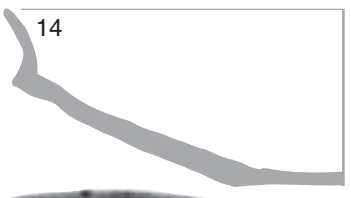
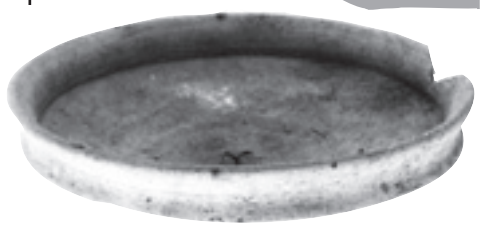
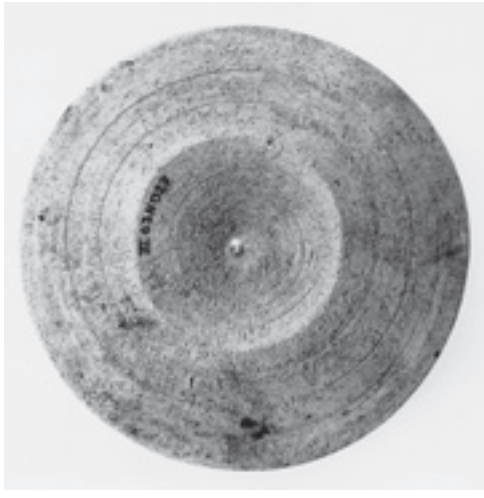


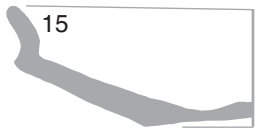



15





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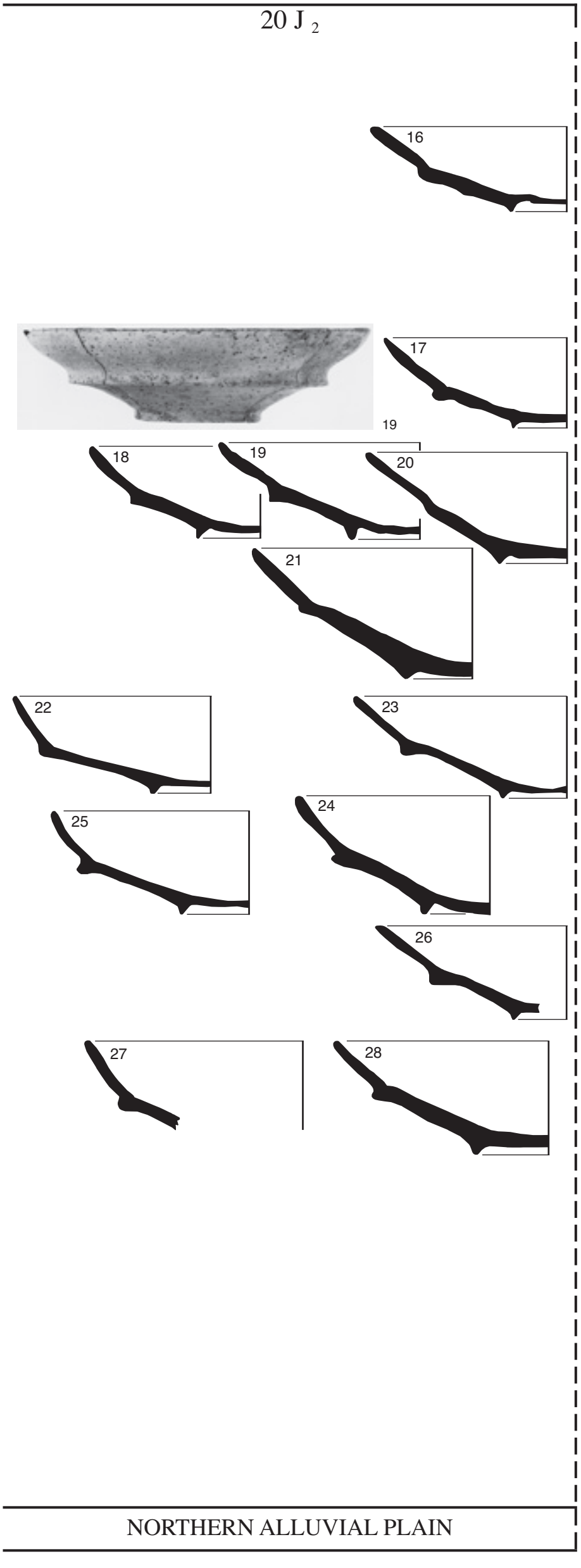
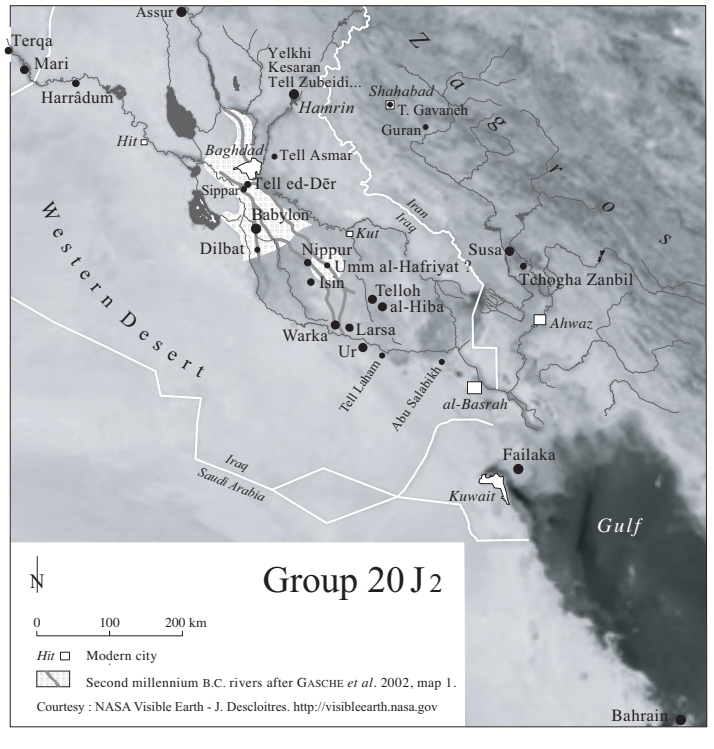



## 20 I

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 106998 | A | IIc | 5Y 8/1 | ø rim : -. |
| 2* | D | 106993 | A | IIc | 7.5YR 7/4 | ø rim : -. Pit 10 dug from IIc. |
| 3* | D | 102457 | A | IIc | 2.5Y 7/2 | ø rim : 210. |
| 4* | D | 103564 | A | IIc | 7.5YR 6/4 | ø rim : 230. *TD* 4, Pl. 14 : 20. |
| 5* | D | 103524 | A | IIc | 5YR 7/6 | ø rim : -. |
| 6* | D | 102602 | A | IIe | 7.5YR 6/4 | ø rim : 260. |
| 7* | D | 106991 | A | IIe | 7.5YR 6.5/4 | ø rim : -. |
| 8* | D | 102571 | A | IIe | 5Y 7/2 | ø rim : 240. Pit 9 dug from IIe. |
| 9* | D | 102618 | A | IIe | 5YR 6/4 | ø rim : 230. *TD* 4, Pl. 14 : 4. |
| 10* | D | 104203 | A | IIf | 7.5YR 6/6 | ø rim : -. |
| 11* | D | 100624 | A | IIf-g | 10YR 7/3 | ø rim : ± 165. *TD* 1, Pl. 28 : 2. |
| 12* | D | 104223 | A | IIg | 5Y 7/2 | ø rim : 190. *TD* 4, Pl. 13 : 4. |
| 13* | D | 104224 | A | IIIb | 7.5YR 6/4 | ø rim : 210. *TD* 4, Pl. 12 : 5. |
| MIDDLE EUPHRATES | | | | | | |
| 14* | M | III H2 NE32a | F | a | 2.5Y 8/2 | ø rim : 181. Burial III H2 NET5. PONS 1999b, fig. 6 : 1. PONS 1999a, 119-120, Pl. 18 : 4 (No. 252246) = JEAN-MARIE 1999, 198 (*tombe* 1106). |
| 15* | M | III G2 NO27 | F | b | 7.5YR 7/4 | ø rim : 128. Burial III G2 NOT4. PONS 1999, fig. 6 : 4 = JEAN-MARIE 1999, 193-194 , Pl. 238 : 2 (*tombe* 1080). |

## 20 J 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 16 | D | 100176 | A | Ic | 7.5YR 6/2 | ø rim : 160. *TD* 1, Pl. 12 : 7. |
| 17* | D | 101935 | A | Ig | 7.5YR 7/4 | ø rim : 148. |
| 18 | D | 102357 | A | Ii | 5Y 7/2 | ø rim : 145. Burial D.155 dug from Ii. |
| 19 | D | 102638 | A | Ii | 5YR 5/6 | ø rim : 164. Burial D.169 dug from Ii. |
| 20 | D | 102358 | A | Ii | 7.5YR 6/4 | ø rim : 162. Burial D.155 dug from Ii. |
| 21* | D | 102693 | A | IIa | 7.5YR 6/4 | ø rim : 181. Burial D.181 dug from IIa. *TD* 4, Pl. 18 : 4. |
| 22* | D | 103907 | A | IIc | 7.5YR 8/2 | ø rim : 162. Burial D.240B dug from IIc. *TD* 4, Pl. 21 : 9. |
| 23 | D | 103730 | A | IIc | 2.5Y 8/1 | ø rim : 176. Burial D.235 probably dug from IIc. |
| 24* | D | 104202 | A | IIc | 5YR 6/6 | ø rim : 160. *TD* 4, Pl. 14 : 21. |
| 25* | D | 103905 | A | IIc | 7.5YR 8/2 | ø rim : 164. Burial D.240B dug from IIc. *TD* 4, Pl. 21 : 8. |
| 26* | D | 104204 | A | IIe | 7.5YR 6/6 | ø rim : 158. Pit 12 dug from IIe. |
| 27* | D | 102662 | A | IIe | 2.5Y 7/2 | ø rim : 180. Pit 9 dug from IIe. |
| 28* | D | 102599 | A | IIe | 10YR 7/3 | ø rim : 178. Pit 9 dug from IIe. |




10 cm

(Photos at various scales)

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20 K

—1600

—1700

—1800

7

1

2

—1900

8

3

4

5

9

10

6

NORTHERN ALLUVIAL PLAIN S. A. P.

—2000

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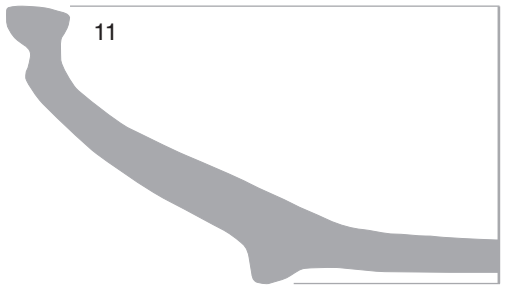
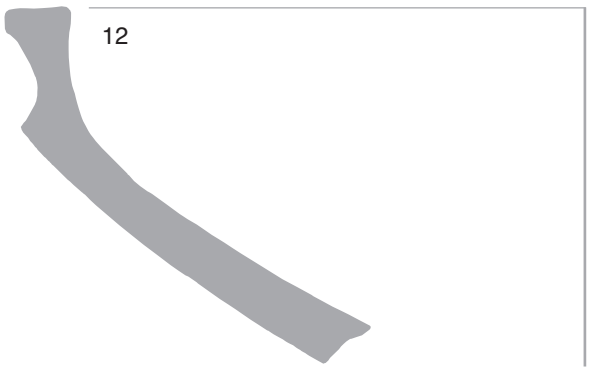
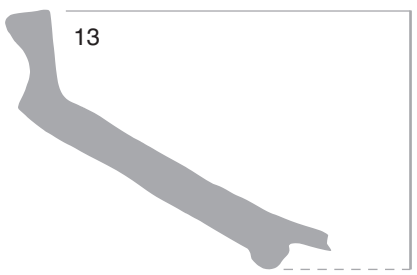
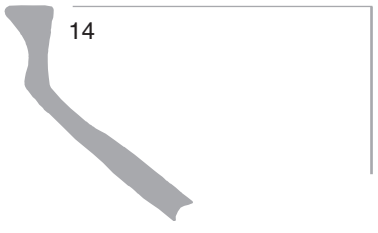
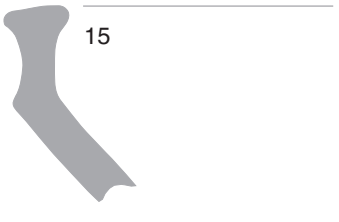
20 K



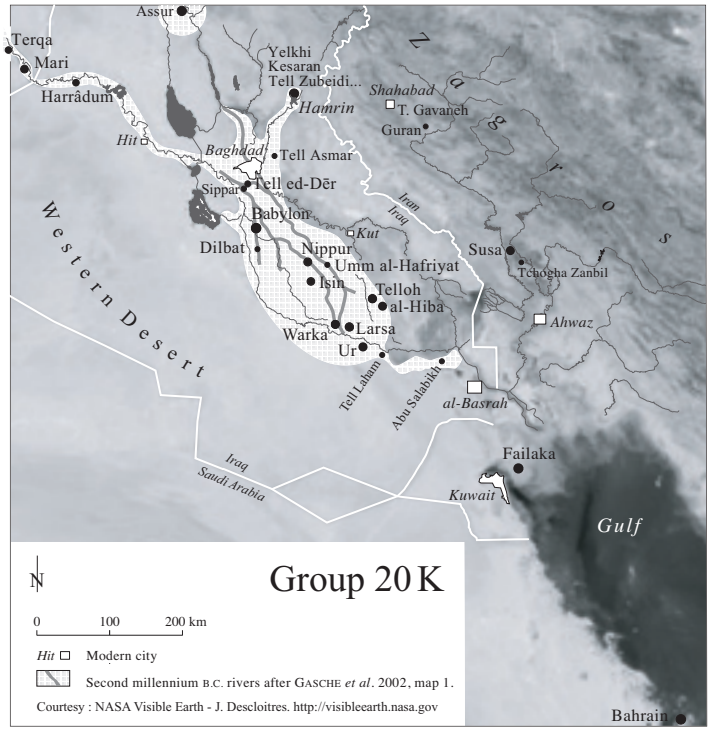



MIDDLE EUPHRATES DIYALA

# PLATE 39

## 20 K

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 104260 | A | IIe | 7.5YR 7/4<br>S : 2.5Y 8/2 | ø rim : 300. *TD* 4, Pl. 14 : 7. |
| 2* | D | 104262 | A | IIIb | 7.5YR 6/4 | ø rim : 270. Pit 14 dug from IIIb. |
| 3* | D | 104261 | A | IIId | 7.5YR 6/4<br>S : 2.5Y 8/2 | ø rim : 280. |
| 4* | D | 104268 | A | IIId | 5YR 6/4 | ø rim : 280. *TD* 4, Pl. 10 : 9. |
| 5* | D | 104265 | A | IIId | 7.5YR 6/2 | ø rim : 250. |
| 6* | D | 104263 | A | IVb | 7.5YR 7/4 | ø rim : 270. Pit 15 dug from IVb. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 7 | N | B 725 | WA | VIA | buff | ø rim : ± 320. |
| 8 | N | D 504 | WC-3 | VB | buff<br>S : cream | ø rim : 250. |
| 9 | N | H 789 : 5 | WF | IX | red<br>S : cream | ø rim : 250. *OIP* 129, Pl. 93 : 5. |
| 10 | N | D 763 | WC-3 | VC | buff | ø rim : 280. |
| MIDDLE EUPHRATES | | | | | | |
| 11 | Din | V 434 | *Bât.* 10 | 3C | *beige* | ø rim : 262. *Haradum* 1, fig. 117 : 1. |
| 12 | M | III J2 NO | F | 0 | 7.5YR 8/2 | ø rim : 310. PONS 1999a, Pl. 22 : 7. |
| 13 | M | III H2 NO | F | - | 5YR 8/2 | ø rim : 214. PONS 1999a, Pl. 21 : 2. |
| 14 | M | III G1 NE/SE | F | a | 5Y 8/2 | ø rim : 195. PONS 1999a, Pl. 21 : 5. |
| 15 | M | III G1 NE/SE | F | a | 5Y 8/3 | ø rim : -. PONS 1999a, Pl. 22 : 5. |
| DIYALA | | | | | | |
| 16 | Yel | 35 | B | VII | *cuoio scuro* | ø rim : -. BERGAMINI 2002-03, Pl. 4 : 27. |
| 17 | Yel | 14 | B | VII | *cuoio* | ø rim : -. BERGAMINI 2002-03, Pl. 4 : 28. |




10 cm

(Photos at various scales)

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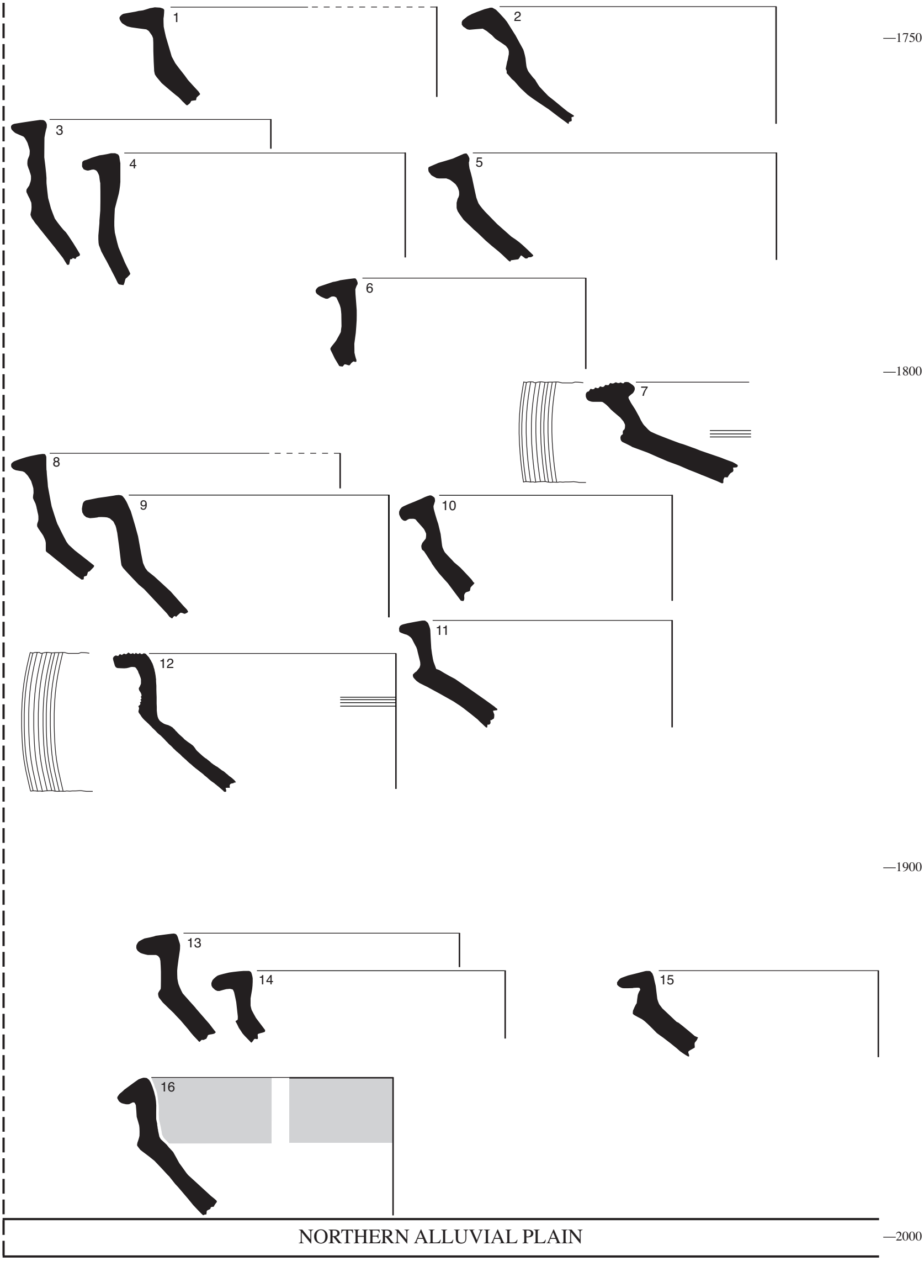
20 L




—1750

—1800

—1900

—2000

NORTHERN ALLUVIAL PLAIN

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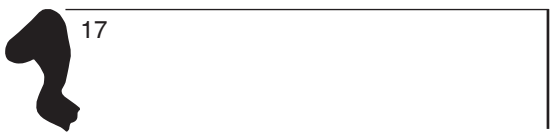
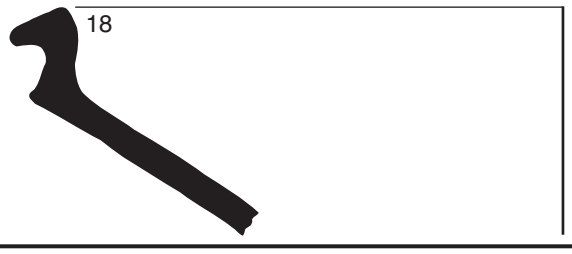
20 L



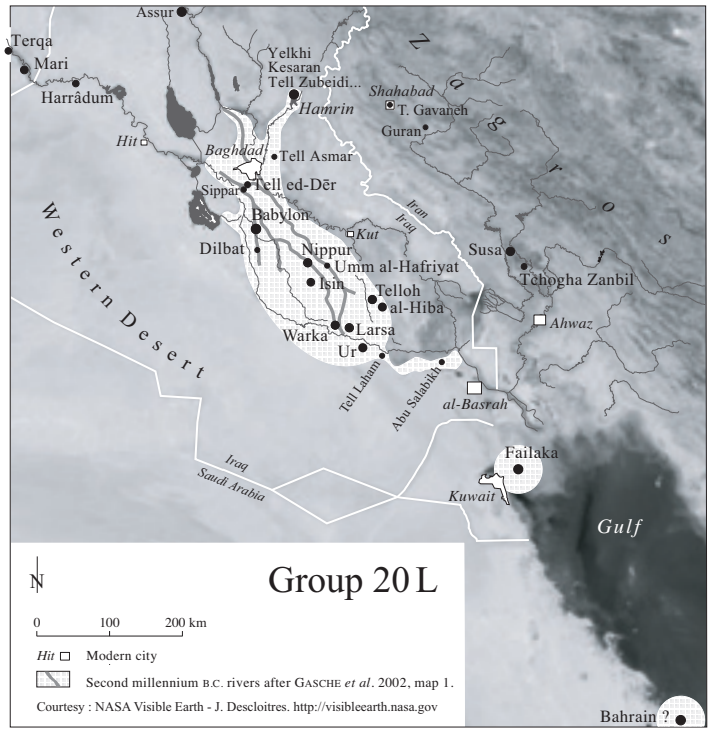




SOUTHERN ALLUVIAL PLAIN

# PLATE 40

## 20 L

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 100158 | A | Ii | 5YR 6/4<br>S : 10YR 8/3 | ø rim : ± 300. |
| 2* | D | 102752 | A | Ii | 7.5YR 6/4 | ø rim : 300. |
| 3* | D | 102364 | A | Ik | 10YR 7/2 | ø rim : 248. |
| 4* | D | 102800 | A | Ik | 7.5YR 7/4 | ø rim : 310. |
| 5* | D | 102362 | A | Ik | 5YR 6/4 | ø rim : 330. |
| 6* | D | 102774 | A | IIa | 7.5YR 6/6 | ø rim : 260. |
| 7* | D | 102497 | A | IIc | 7.5YR 6/4 | ø rim : -. Top of rim and side of vessel decorated with grooves. |
| 8* | D | 100589 | A | IId-e | 10YR 7/3<br>S : 5Y 7/2 | ø rim : ± 310. *TD* 1, Pl. 28 : 3. |
| 9* | D | 104274 | A | IIe | 5YR 6/4 | ø rim : 290. Pit 12 dug from IIe. |
| 10* | D | 104276 | A | IIe | 7.5YR 6/4 | ø rim : 260. Pit 12 dug from IIe. |
| 11* | D | 102592 | A | IIe | 5YR 5/6 | ø rim : 260. Pit 9 dug from IIe. |
| 12* | D | 104098 | A | IIf | 5YR 7/4 | ø rim : 270. Rim decorated with grooves. |
| 13* | D | 104275 | A | IIId | 7.5YR 7/4 | ø rim : 310. *TD* 4, Pl. 10 : 8. |
| 14* | D | 104277 | A | IIId | 7.5YR 6/4 | ø rim : 280. |
| 15* | D | 104279 | A | IIId | 7.5YR 6/4 | ø rim : 250. |
| 16* | D | 104278 | A | IVb | 7.5YR 6/4 | ø rim : 260. *TD* 4, Pl. 8 : 8. Complete decor. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 17 | N | D 664 | WC-3 | VC | buff | ø rim : 285. |
| 18 | N | D 679 | WC-3 | VD | buff | ø rim : 290. |




10 cm

(Photos at various scales)

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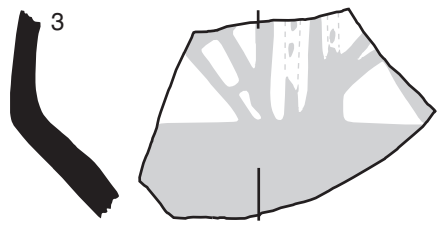
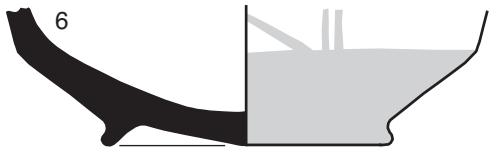
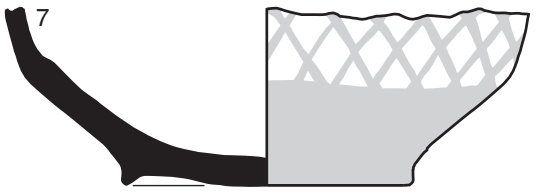
—1500

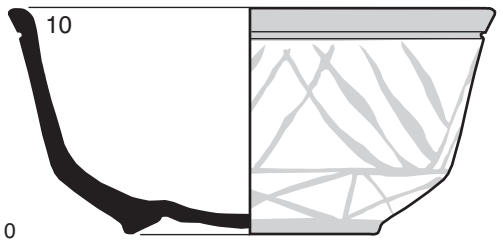


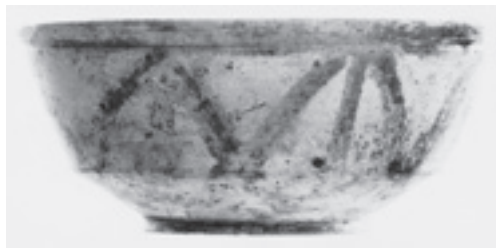



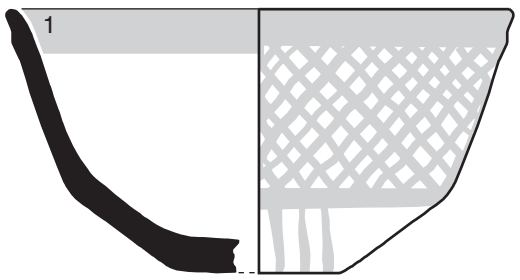

—1600

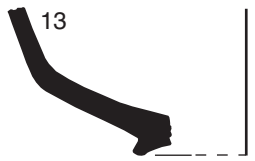
10

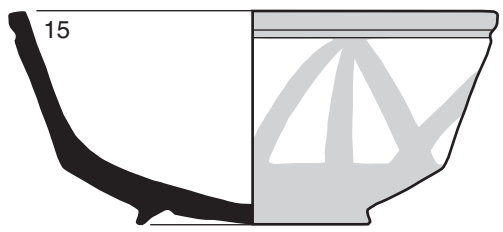


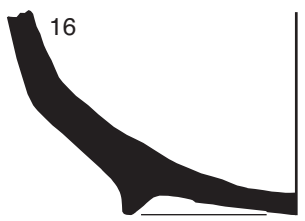



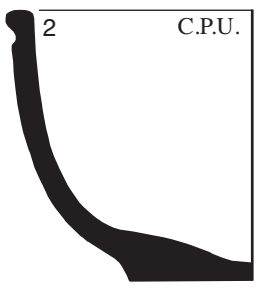
15

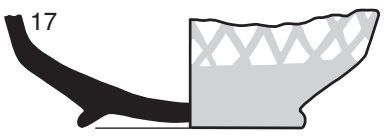


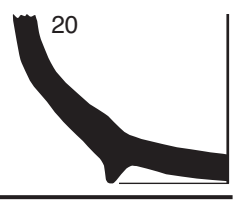



—1700




1example attested at Tell ed-Dēr, see text

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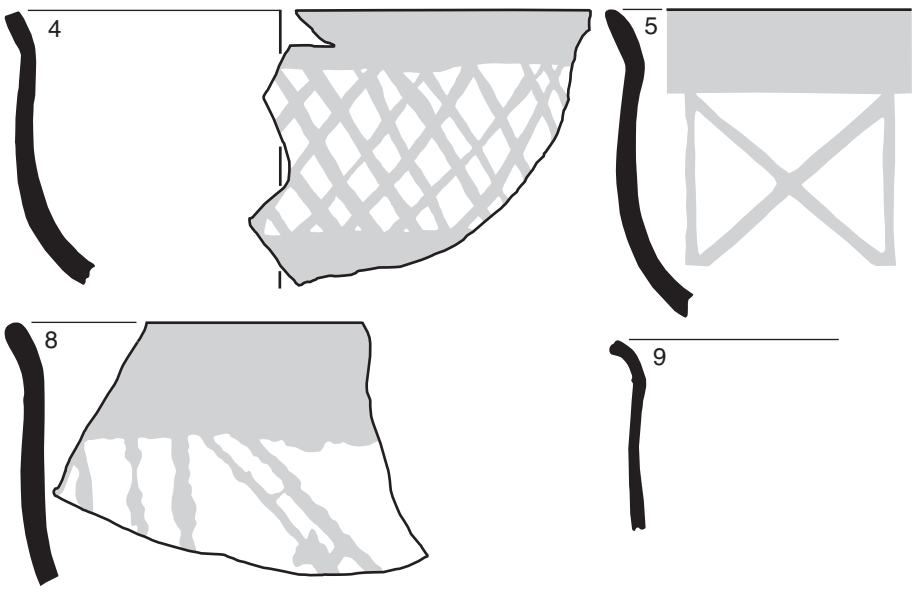
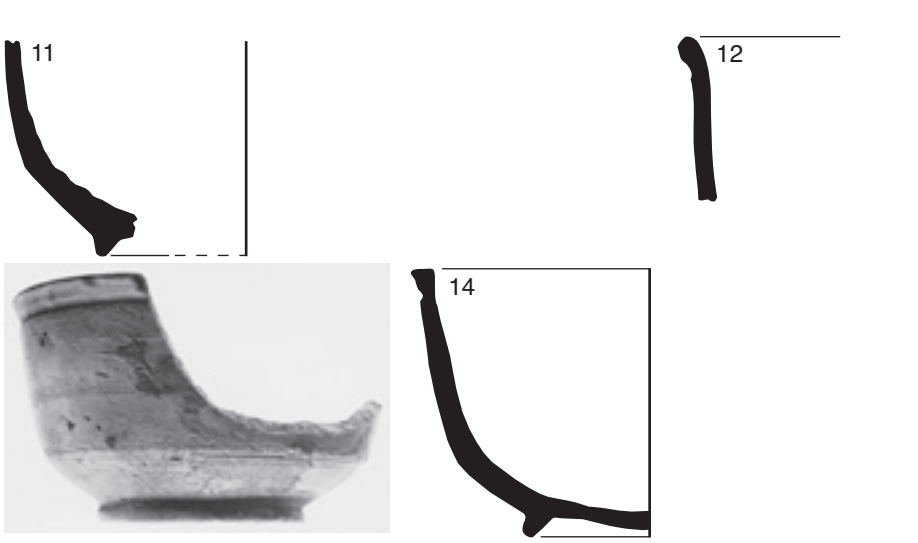
## 25 A 2




14

## 25 A 1

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | N | A 2059 | WB | IV 3 | pink | ø rim : 130. Geometric design on exterior with band over rim in dark paint. |
| 2 | W | 19982 | Sînkāšid | 0 | *rot* | ø rim : 130. VAN ESS 1988a, fig. 5 : 59. Unpainted. |

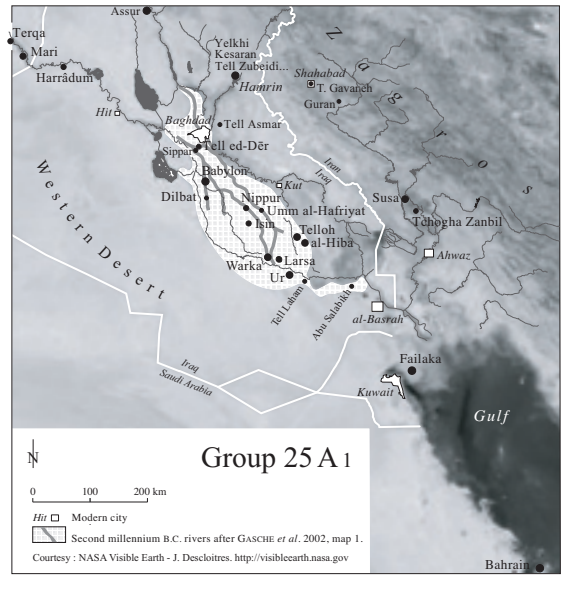
## 25 A 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 3* | D | 105783 | E | IIId | 7.5YR 7/4 | ø rim : -. *MHEM* 1, Pl. 27 : 30. Geometric design on exterior in dark paint (10YR 3/1) ; interior painted. |
| 4* | D | 104452 | E | IIIe | 5YR 6/4 | ø rim : 145. *MHEM* 1, Pl. 29 : 12. Geometric design on exterior in dark paint (5YR 3/2) ; interior painted. |
| 5* | D | 103240 | E | IIIe | 10YR 7/2 | ø rim : -. *MHEM* 1, Pl. 29 : 11. Geometric design on exterior in dark paint (5YR 6/1). |
| 6* | D | 103942 | E | IIId-e | 5YR 7/4 | ø rim : -. *MHEM* 1, Pl. 27 : 28. Geometric design on exterior in dark paint (5YR 4/1). |
| 7* | D | 100832 | A | 0 | 7.5YR 7/4 | ø rim : -. Geometric design on exterior in dark paint. |
| 8 | Dey | A 206.2 | B | IV | 7.5YR 7/6<br>S : 2.5Y 8/4 | ø rim : -. In fill of Burial 12, dug from IV. ARMSTRONG 2001, fig. 8 : i. Geometric design on exterior in dark paint. |
| 9 | Dey | A 100.1 | B | IV | 10YR 7/6<br>S : 5Y 8/4 | ø rim : ± 120. ARMSTRONG 2001, fig. 8 : j. Unpainted. |
| 10 | D | 101370 | A | Ia | 5YR 6/6 | ø rim : 125. Burial D.33 dug from Ia. *TD* 2, Pl. 15 : 1. Geometric design on exterior in dark paint (5YR 3/1) |
| 11* | D | 101255 | A | Ic | 7.5YR 6/4 | ø rim : -. Traces of painted decoration. |
| 12 | D | 100794 | A | Ic | 7.5YR 6/4 | ø rim : -. Decorated like No. 10. |
| 13* | D | 100398 | A | Ic | 5YR 6/4 | ø rim : -. Traces of painted |
| 14* | D | 101024 | A | Ic | 5YR 6/4 | ø rim : 122. Unpainted. Slip. |
| 15 | D | 100054 | A | Ic[1)] | 7.5YR 6/4 | ø rim : 130. *TD* 1, Pl. 11 : 11. Geometric design on exterior in dark paint. |
| 16* | D | 100229 | A | Ic | 7.5YR 6/4 | ø rim : -. |
| 17* | D | 101018 | A | Ie | 7.5YR 7/4 | ø rim : -. Geometric design on exterior in dark paint. |
| 18* | D | 101736 | A | If | 5YR 6/6 | ø rim : -. Unpainted. |
| 19* | D | 101574 | A | Ig | 7.5YR 7/4 | ø rim : ± 155. Unpainted. |
| 20* | D | 100516 | A | Ig | 7.5YR 6/4<br>S : 10YR 7/3 | ø rim : -. Unpainted. |

1) See *TD* 2, 38 for the stratigraphical correction.

C.P.U. = Chronological Position Uncertain

Continued on Pl. 42




10 cm

(Photos at various scales)

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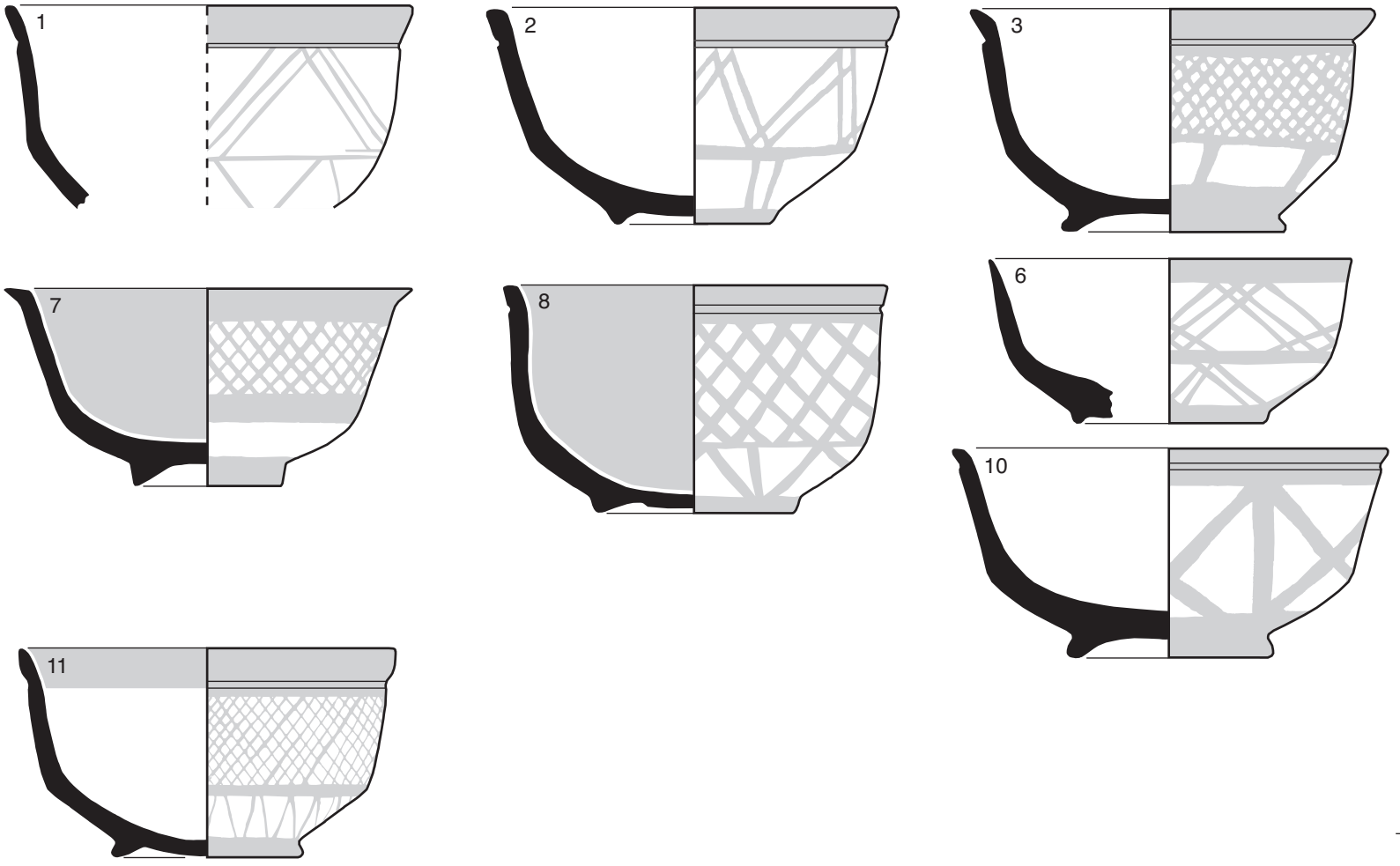
—1600




—1700

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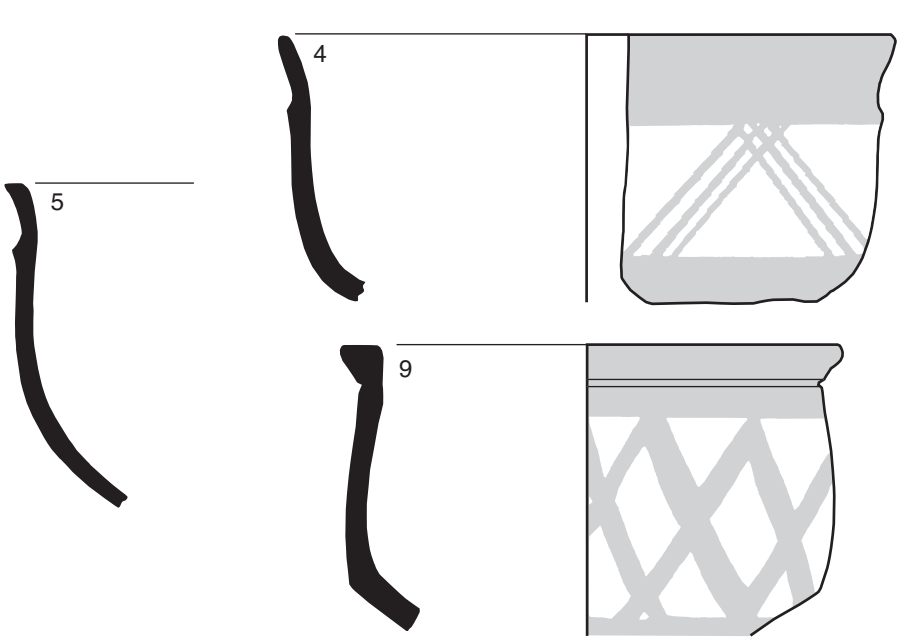
25 A 2



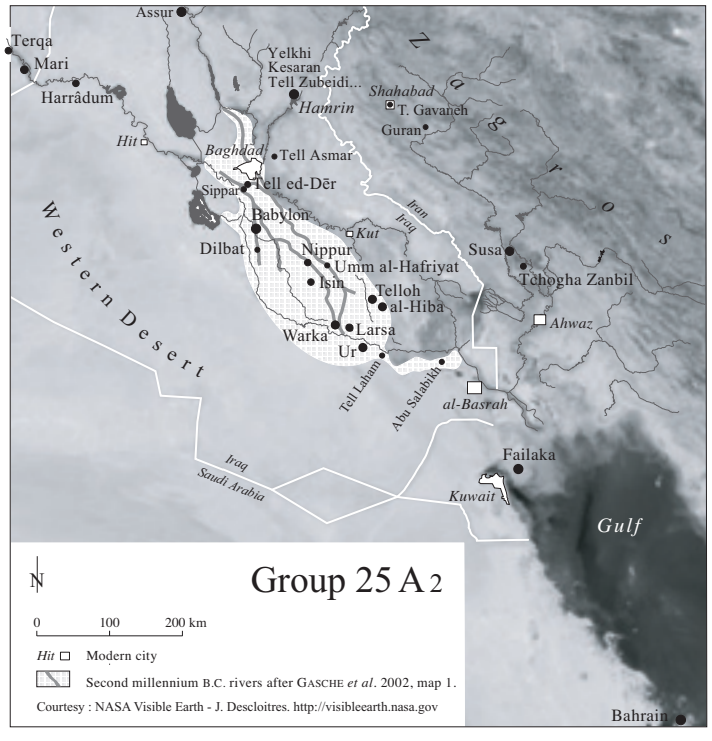

SOUTHERN ALLUVIAL PLAIN

# PLATE 42



Continued from Pl. 41

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | I | - | *NOA* III | - | 7.5YR 8/4<br>S : 10YR 8/2 | ø rim : 121. *Isin* 3, 78, Pl. 29 : 14.<br>Geometric design on exterior in dark paint. |
| 2 | I | - | *NOA* IV | - | 7.5YR 8/6<br>S : 10YR 8/4 | ø rim : 124. *Isin* 3, 78, Pl. 29 : 15.<br>Geometric design on exterior in dark paint. |
| 3 | I | IB 519 | *NA* II | 7,39m | *gelblich*<br>S : *gelbl.-rötl.* | ø rim : 116. *Isin* 1, 61, Pl. 28.<br>Geometric design on exterior in dark paint. |
| 4 | I | 0161 | *NOA* II | 6,40m | 5YR 7/6<br>S : 10YR 8/3 | ø rim : 162. *Isin* 3, 78, Pl. 29 : 13.<br>Geometric design on exterior in dark paint. |
| 5 | N | A 2016 | WB | IV 4 | buff | ø rim : ± 130. Unpainted. |
| 6 | W | 19838b | Sînkāšid | 4 | - | ø rim : 110. VAN ESS 1988a, fig. 4 : 52. Geometric design on exterior in dark paint. |
| 7 | N | B 1001 | WB | IV 2 | buff<br>S : cream | ø rim : 122. FRANKE 1978, fig. 59 : 3d. Geometric design on exterior in dark paint ; interior painted. |
| 8 | N | B 158 | WB | IV 2-3 | pinkish | ø rim : 118. FRANKE 1978, fig. 59 : 3c. Geometric design on exterior in dark paint ; interior painted. |
| 9 | I | 0269 | *NOA* III | 6,50m to 6,70m | 5YR 6/6<br>S : 2.5Y 8/4 | ø rim : 132. Geometric design on exterior in dark paint. |
| 10 | I | IB 467 | *NA* II | - | *hellbraun*<br>S : *hellgelb* | ø rim : 122. *Isin* 1, 61, Pl. 28.<br>Geometric design on exterior in dark paint. |
| 11 | N | 3P 408 | *TA* | XI | tan<br>S : buff | ø rim : 114. *OIP* 78, Pl. 88 : 19.<br>Geometric design on exterior with band over rim in dark paint. |




10 cm

(Photos at various scales)

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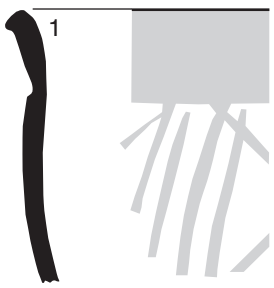


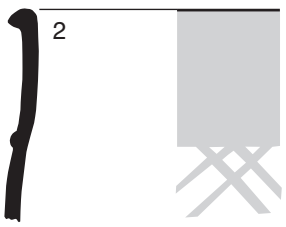

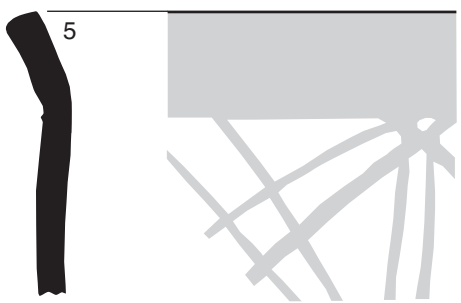


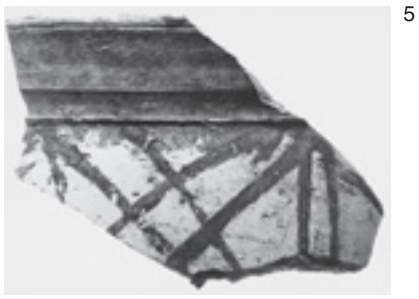

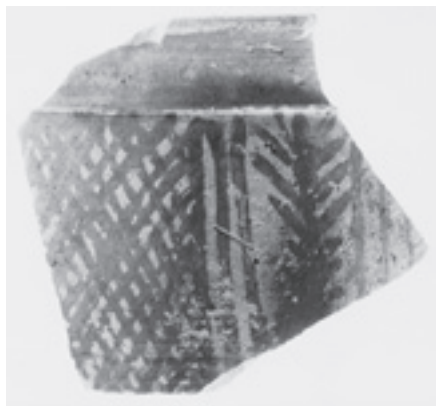

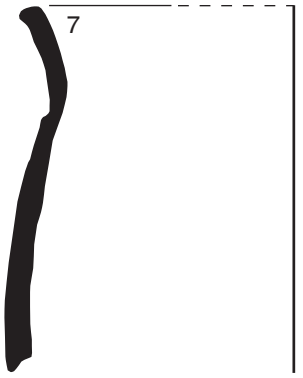

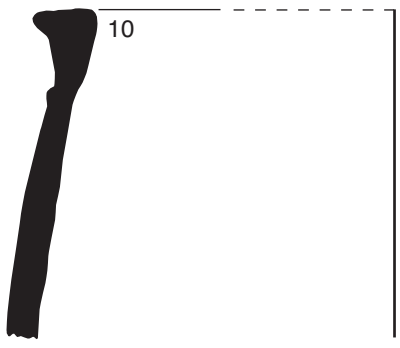


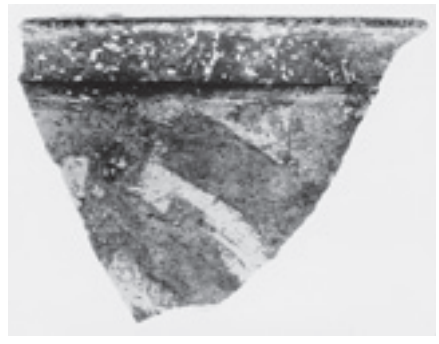

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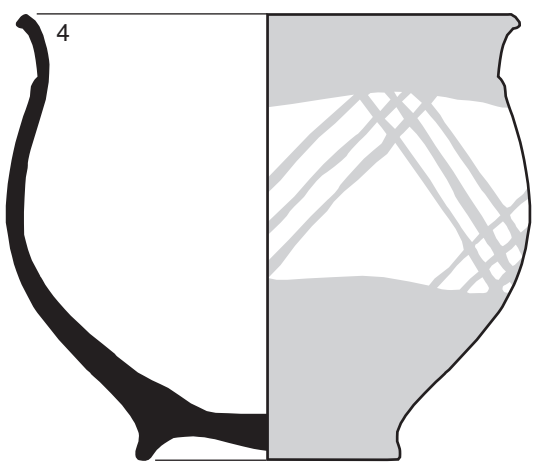
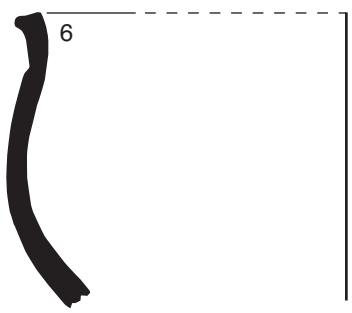
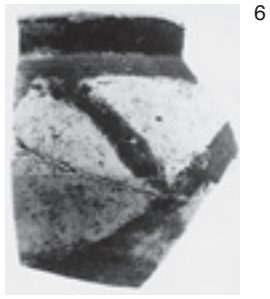
30 A 2




| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 103897 | E | IIIa | 7.5YR 6/4 | ø rim : -. *MHEM* 1, Pl. 29 : 3. Geometric design on exterior in dark paint (7.5YR 4/2). |
| 2* | D | 103870 | E | IIIc | 2.5YR 6/6 | ø rim : -. *MHEM* 1, Pl. 29 : 6. Geometric design on exterior in dark paint (5YR 6/1). |
| 3* | D | 104014 | E | IIId | 10YR 8/3 | ø rim : -. *MHEM* 1, Pl. 29 : 5. Geometric design on exterior in dark paint (10YR 4/1). |
| 4* | D | 103368 | E | IIIe | 5Y 7/3 | ø rim : 130. *MHEM* 1, Pl. 29 : 1. Geometric design on exterior in dark paint (10YR 3/2) |
| 5* | D | 103928 | E | IIIe | 7.5YR 7/4 | ø rim : -. *MHEM* 1, Pl. 29 : 4. Geometric design on exterior in dark paint (7.5YR 4/2). |
| 6* | D | 100745 | B | D 33-34 | 7.5YR 7/4 | ø rim : ± 160. Fill of peripherical dike. *TD* 2, Pl. 6 : 4. Geometric design on exterior in dark paint. |
| 7* | D | 101269 | A | Ib | 5YR 5/6 | ø rim : ± 140. *TD* 2, Pl. 19 : 3. Geometric design on exterior in dark paint. |
| 8* | D | 101308 | A | Ib | 10YR 6/4 | ø rim : -. Unpainted. |
| 9* | D | 101042 | A | Ic | 10YR 7/3 | ø rim : -. Pit 3 dug from Ic. Geometric design on exterior in dark paint. |
| 10* | D | 101237 | A | Ic | 7.5YR 6/4 | ø rim : ± 190. Geometric design on exterior in dark paint. |

Continued on Pl. 44

10 cm

(Photos at various scales)

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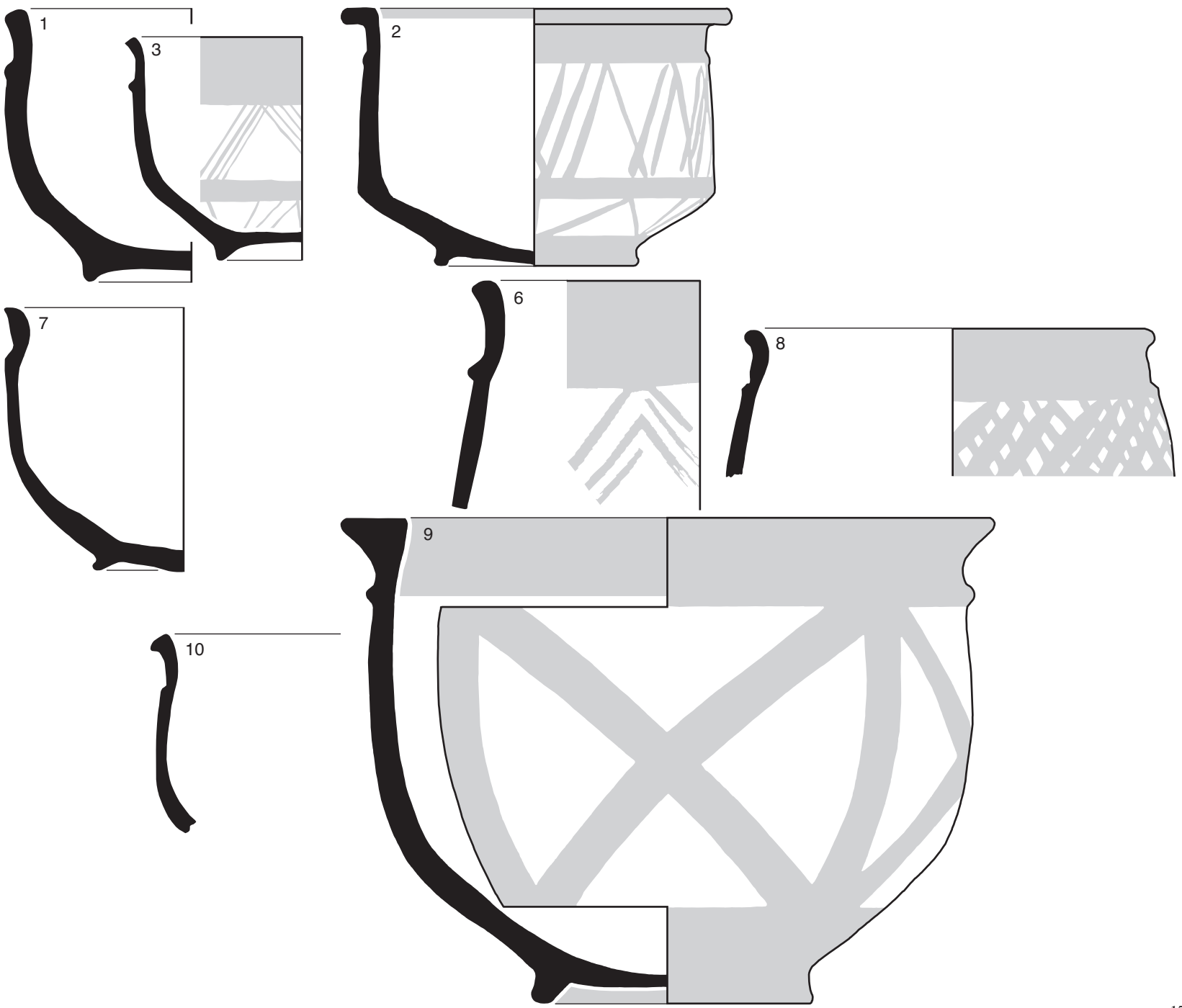
—1600




—1700

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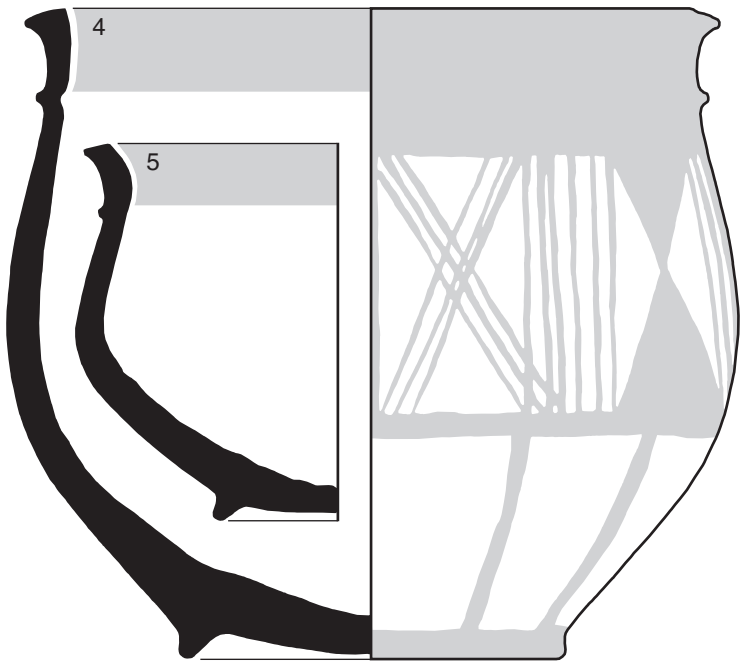
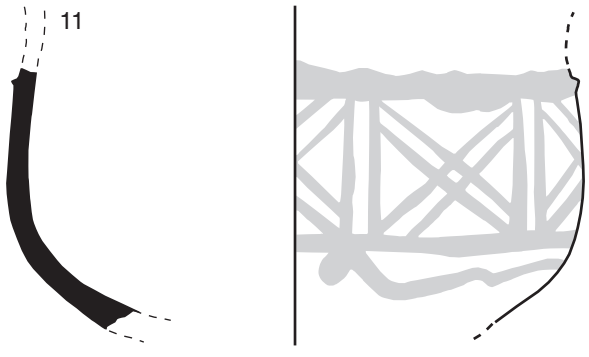
# PLATE 44

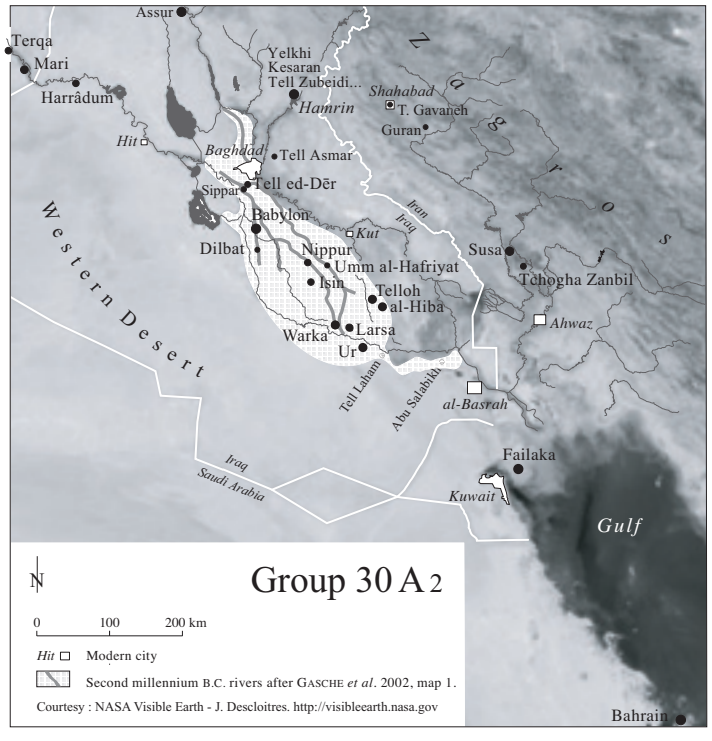


Continued from Pl. 43

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | N | B 963 | WB | IV 4 | pink | ø rim : 136. Unpainted. |
| 2 | N | 2N 92 | TB | D | cream | ø rim : 142. McCONN 1952, fig. 5a, center. OIP 78, Pl. 88 : 20. Geometric design on exterior with band over rim in dark paint. |
| 3 | N | A 2066 | WB | IV 4 | pink | ø rim : 128. Geometric design on exterior in dark paint. |
| 4 | N | 3N 136 | TA | X | tan<br>S : buff | ø rim : 180. *OIP* 78, Pl. 88 : 23. Geometric design on exterior with band over rim in dark paint. |
| 5 | N | 2N 1096 | TB | E | brownish-tan<br>S : light pinkish-buff | ø rim : 138. *OIP* 78, Pl. 88 : 18. Geometric design on exterior with band over rim in dark paint. |
| 6 | I | 0194 | *NOA* IV | - | 10YR 8/4<br>S : 2.5Y 8/2 | ø rim : 168. *Isin* 3, Pl. 29 : 6. Geometric design on exterior in dark paint. |
| 7 | L | 59.46 | *Mais*. 59 | *Sols* | *chamois* | ø rim : 128. Exc. Huot. CALVET 2003, fig. 64. Unpainted. |
| 8 | L | 59.127 | *Mais*. 59 | *Sols* | *jaune* | ø rim : 148. Exc. Huot. CALVET 2003, fig. 70 and Pl. 36 : d. Geometric design on exterior in dark paint. |
| 9 | N | 2N 1097 | TB | I 2 | brownish-tan<br>S : creamy-buff | ø rim : 238. *OIP* 78, Pl. 88 : 22. Geometric design on exterior with band over rim in dark paint. |
| 10 | L | 27.530 | *Mais*. 27 | *Rempl.* | *chamois* | ø rim : 140. Exc. Huot. CALVET 2003, fig. 49. Unpainted. |
| 11 | L | 27.166 | *Mais*. 27 | *Rempl.* | *jaune* | ø rim : -. Exc. Huot. CALVET 2003, fig. 49. Geometric design on exterior in dark paint. |




10 cm

(Photos at various scales)

SOUTHERN ALLUVIAL PLAIN

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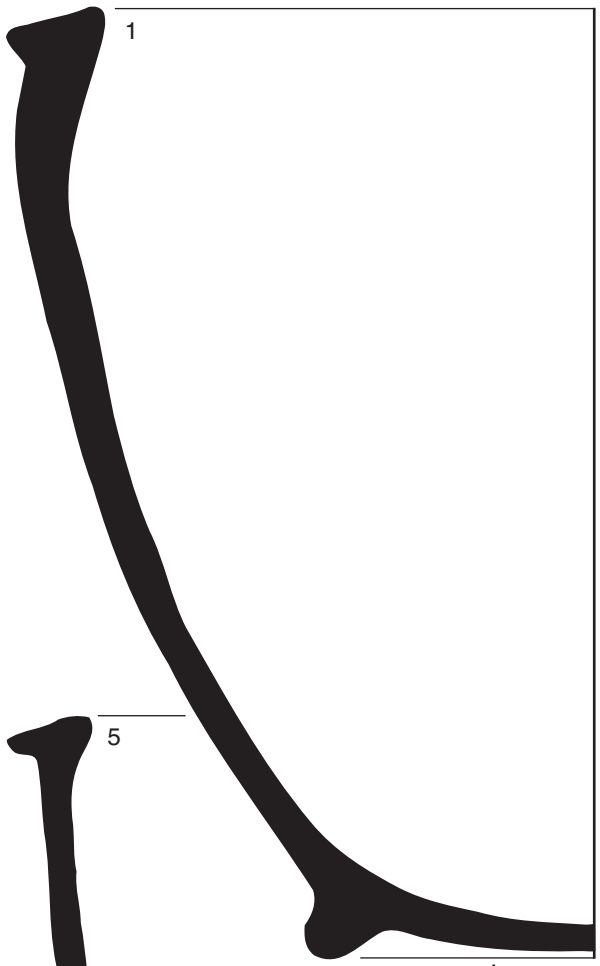
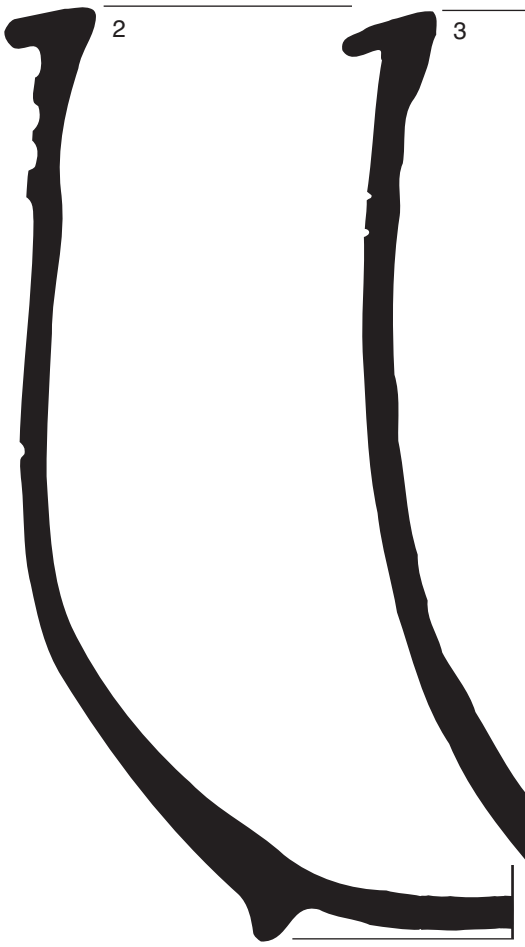
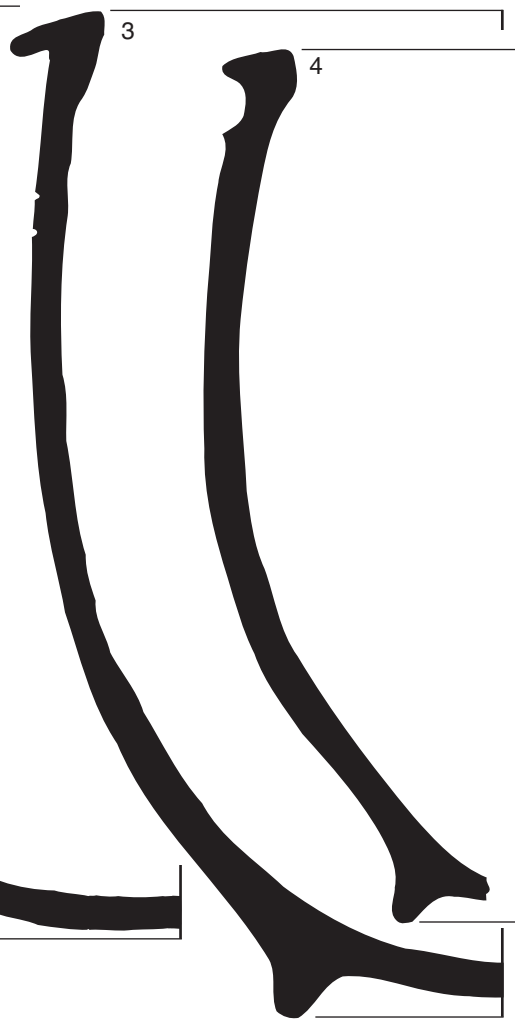
—1650

35 A 2



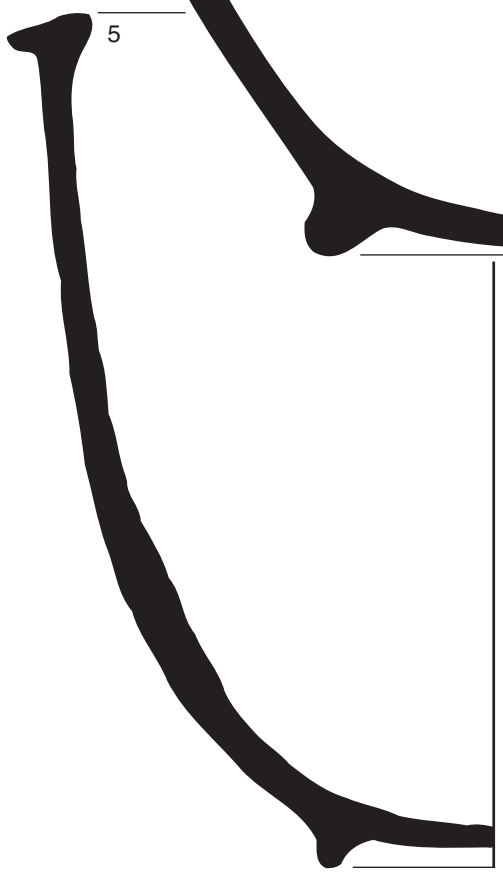







—1700



8

NORTHERN ALLUVIAL PLAIN

—1800

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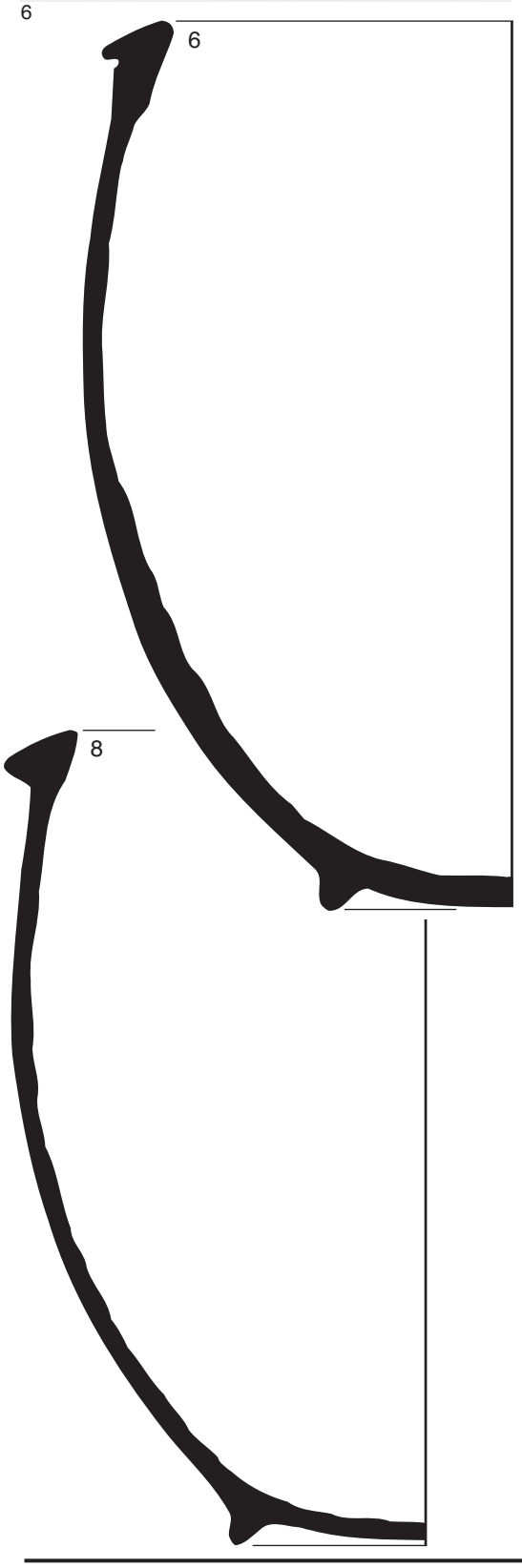

## 35 A 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | D | 101080 | A | Ie | 5YR 5/6 | ø rim : 310. Burial D.17 dug from Ie. |
| 2 | D | 101333 | A | Ie | 5Y 7/3 | ø rim : 263. Burial D.28 probably dug from Ie. |
| 3 | D | 101341 | A | Ie | 2.5Y 7/4 | ø rim : 259. Burial D.31 probably dug from Ie. SALLABERGER 1996, Pl. 4 : 1. |
| 4* | D | 101711 | A | Ie | 10YR 7/4 | ø rim : 230. *TD* 2, Pl. 19 : 2. |
| 5 | D | 101927 | A | Ig | 7.5YR 6/4 | ø rim : 250. Burial D.46 dug from Ig. |
| 6 | D | 101645 | A | Ig | 7.5YR 7/4 | ø rim : 226. Burial D.48 dug from Ig. |
| 7 | D | 102790 | A | Ii | 10YR 7/3 | ø rim : 230. Burial D.189 dug from Ii. |
| 8 | D | 101747 | A | Ii | 7.5YR 6/4 | ø rim : 228. Burial D.61 dug from Ii. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 9 | N | B 180 | WB | IV 2 | buff | ø rim : ± 240. |
| 10 | U | 302 | A | II | buff<br>S : cream | ø rim : ± 300. |
| 11 | U | 404 | A | II | buff<br>S : cream | ø rim : ± 220. |

Continued on Pl. 46

10 cm

(Photos at various scales)

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—1500

—1600

—1650

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# PLATE 46

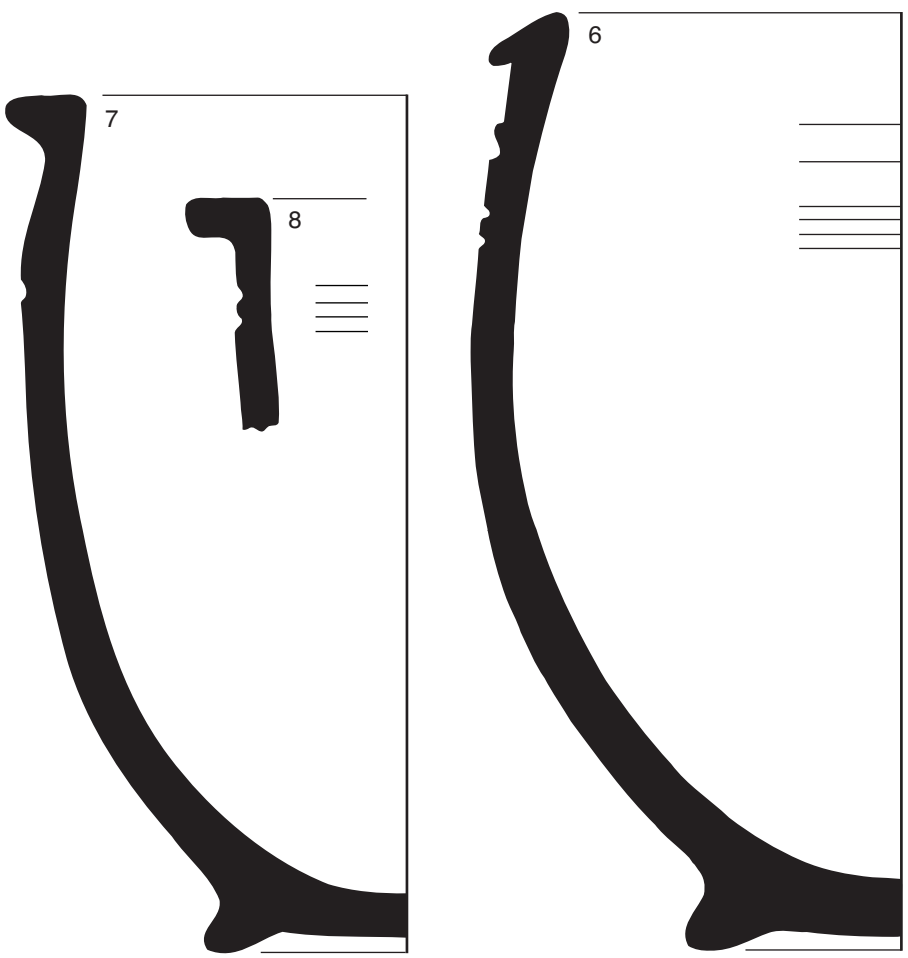
35 A 2

Continued from Pl. 45

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | Dey | A 96.1 | B | III | 5Y 7/2<br>S : 5Y 8/3 | ø rim : 242. Burial 10 dug from III. ARMSTRONG 2001, figs. 5 and 11 : f. |
| 2 | D | 101298 | A | Intrusive in Layer Ia | 5Y 6/3 | ø rim : 220. Burial D.19. *TD* 2, Pl. 13 : 1. |
| 3 | D | 101334 | A | Ic | 5YR 7/6 | ø rim : 275. Burial D.24 probably dug from Ic. |
| 4 | D | 101330 | A | Ic | 10YR 6/3 | ø rim : 235. Burial D.25 probably dug from Ic. |
| 5 | D | 101336 | A | Ic | 7.5YR 6/4 | ø rim : 220. Burial D.26 probably dug from Ic. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 6 | I | - | *NOA* III | - | - | ø rim : 215. Burial 131. *Isin* 3, Pl. 27 : 9 ; on p. 74, only the cover of the burial is described. |
| 7 | I | IB 1585 | *NOA* IV | 6,35m[1)] | 5Y 8/2 | ø rim : 212. Burial 127[1)]. *Isin* 3, 74, Pl. 27 : 8. |
| 8 | N | B 1003 | WB | IV 6 | greenish-buff | ø rim : ± 220. FRANKE 1978, fig. 61 : 2a. |

1) Information found in the catalogue supplied by the Isin-Expedition. In *Isin* 3, 74 *sub* 8 the burial is No. 129.

Continued on Pl. 47




10 cm

(Photos at various scales)

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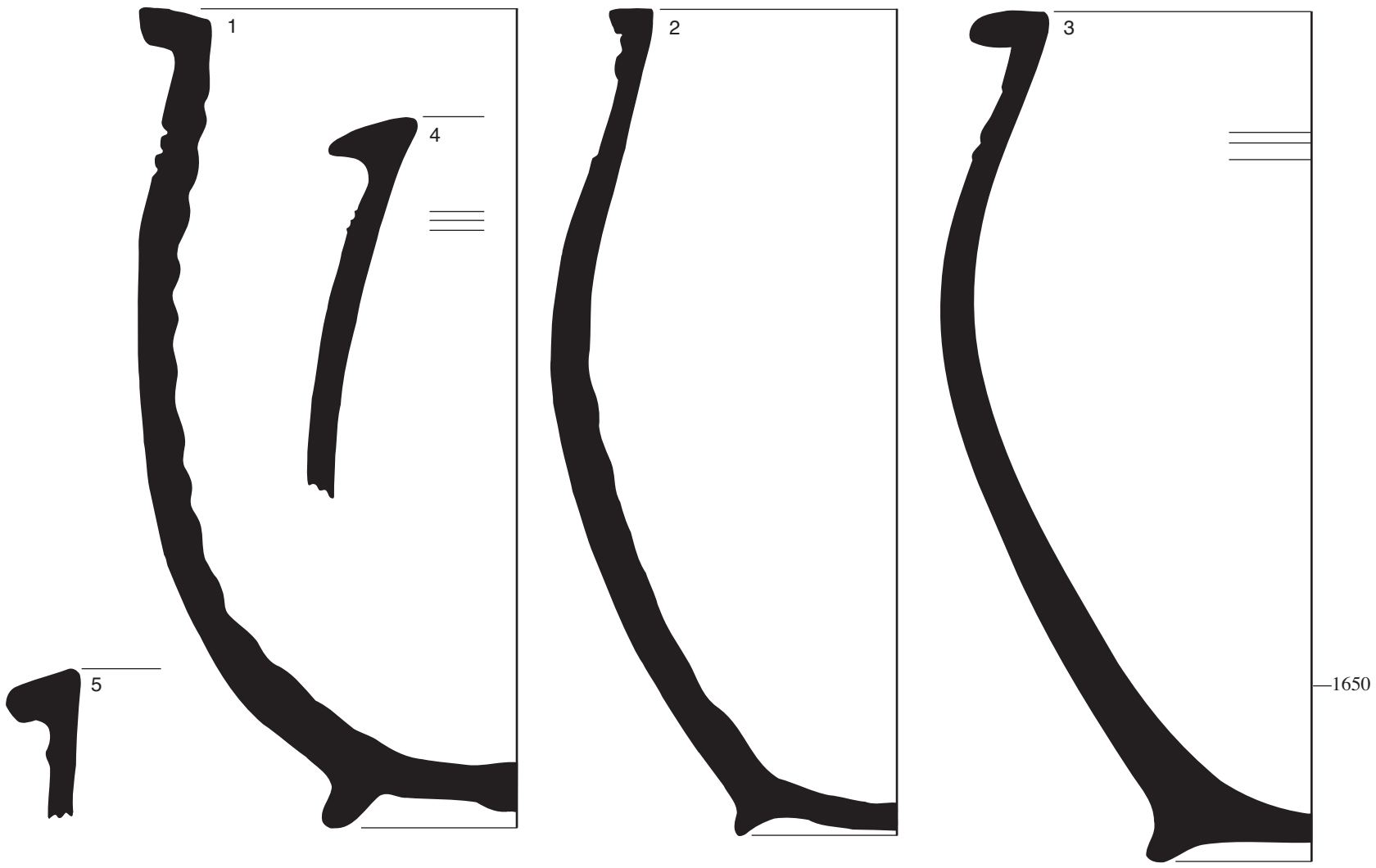
—1600




—1650

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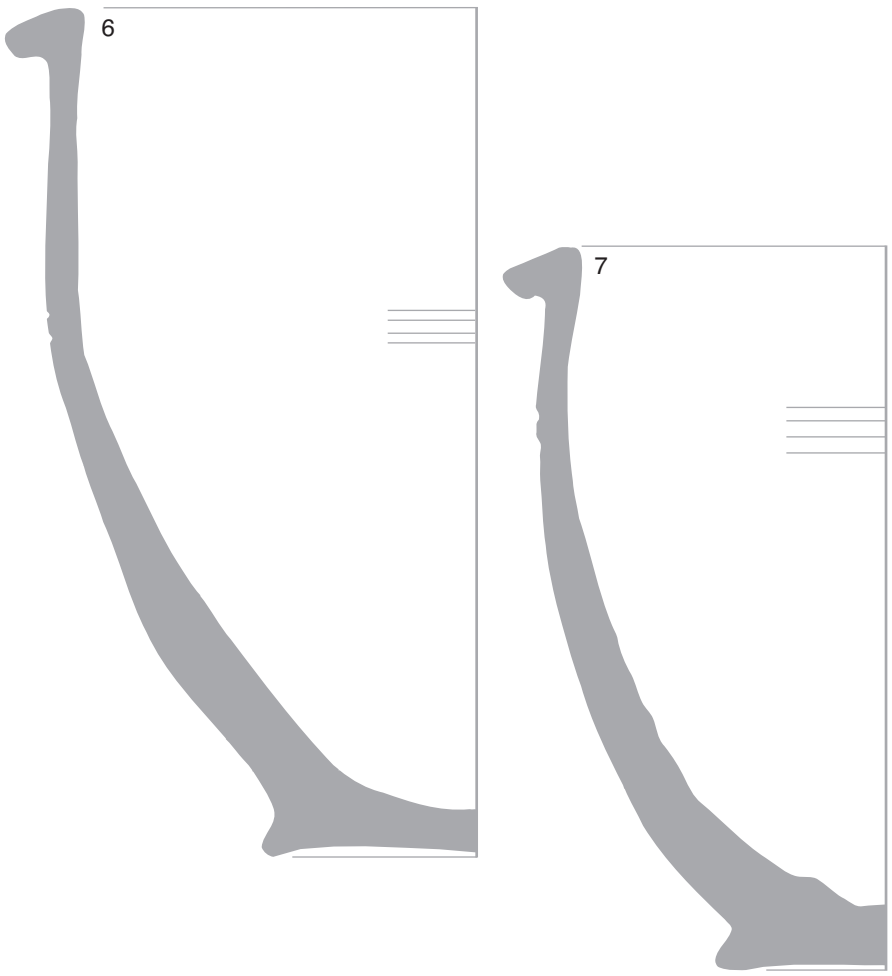
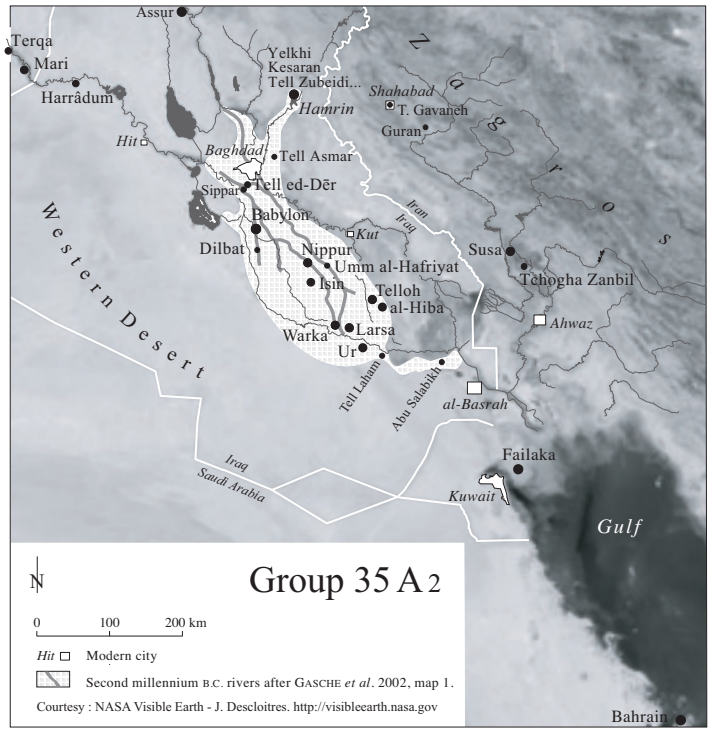



# PLATE 47

## 35 A 2

Continued from Pl. 46

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | N | 2P 774 | TB | Intr. in D | greenish-buff | ø rim : 248. Burial 1B 188. *OIP* 78, Pl. 89 : 6. |
| 2 | N | 3P 177 | TA | X | buff | ø rim : ± 195. *OIP* 78, Pl. 89 : 11. |
| 3 | I | IB 1635 | *NOA* III | 6,46m | 10YR 8/3 S : 5Y 8/2 | ø rim : 222. |
| 4 | N | B 171 | WB | IV 4 | light green | ø rim : ± 300. |
| 5 | U | 83 | A | I | pink | ø rim : ± 200. |
| DIYALA | | | | | | |
| 6 | Yel | y 478 | B | IIIb | *cuoio scuro* | ø rim : 244. GABUTTI, 2002-03, Pl. 48 : 2. |
| 7 | Yel | y 162 | B | IVa | *cuoio* | ø rim : 198. GABUTTI, 2002-03, Pl. 48 : 3. |




10 cm

(Photos at various scales)

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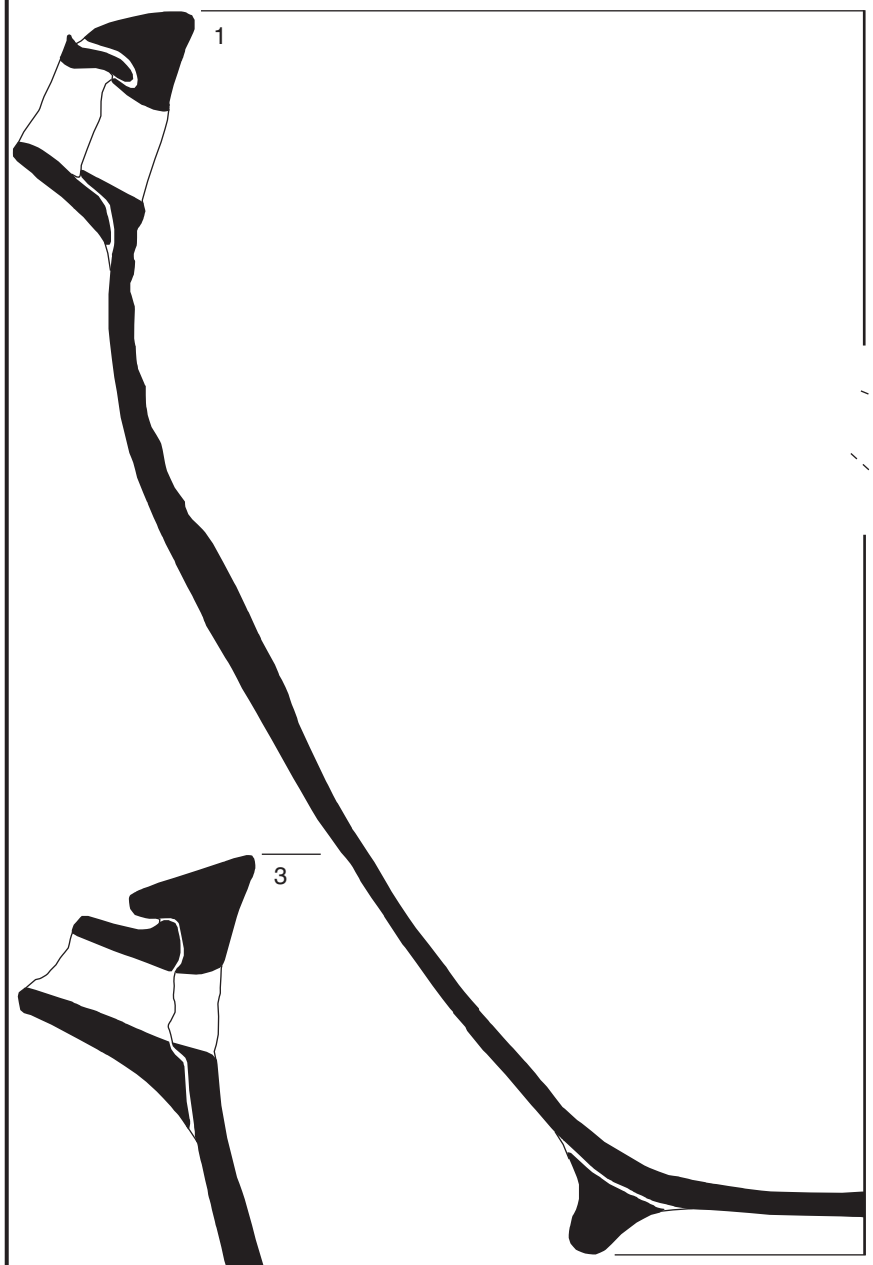
1



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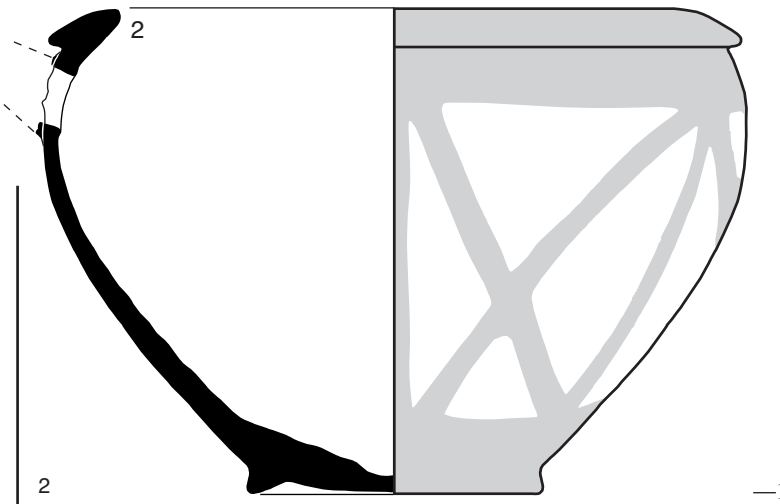

2

3

3

4



5

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# PLATE 48

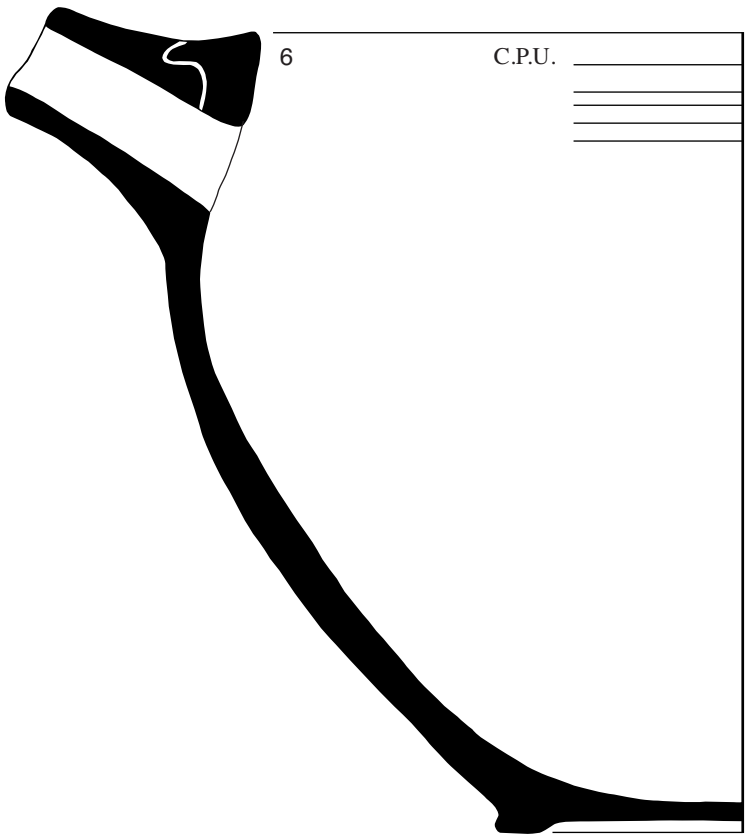
## 40 A 2

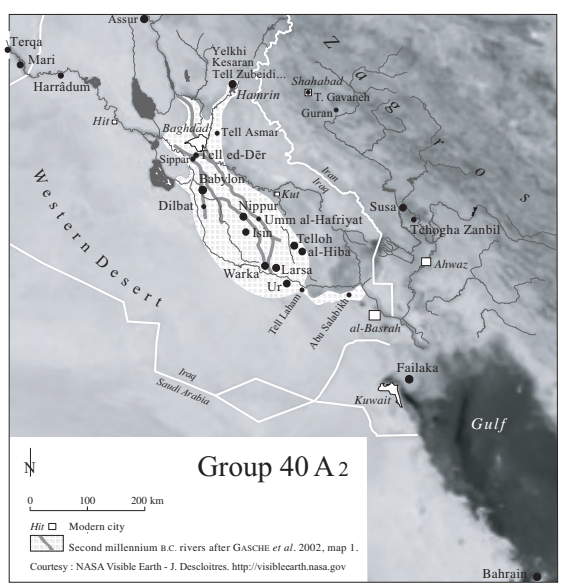
| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 103687 | E *sud* | IIIb | 10YR 7/3 | ø rim : 440. Burial D.227 dug from IIIb. |
| 2 | D | 100990 | A | Ie | 7.5YR 6/4 | ø rim : 180. *TD* 2, Pl. 19 : 1. Geometric design on exterior in dark paint. |
| 3* | D | 101948 | A | Ig | 7.5YR 6/4 | ø rim : ± 390. Burial D.121 dug from Ig. |
| 4* | D | 102773 | A | IIa | 10YR 6/4 | ø rim : 300. |
| 5* | D | 102537 | A | IIe | 5Y 6/3 | ø rim : 360. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 6 | W | 20029e | Sînkāšid | 0 [1] | *rot* | ø rim : 300. Disturbed Burial 50, under Room 16 of the palace. *AUWE* 10, Pl. 28 : e = VAN ESS 1988a, fig. 11 : 96. Redrawn from *UVB* 18, Pl. 25 : h. |
| 7 | U | 98 | A | II | buff | ø rim : 282. |
| DIYALA | | | | | | |
| 8 | Yel | - | B | VIa | - | ø rim : 316. GABUTTI 2002-03, Pl. 128 : 1. |

[1] See Pl. 8, note 2).

C.P.U. = Chronological Position Uncertain

6 C.P.U.

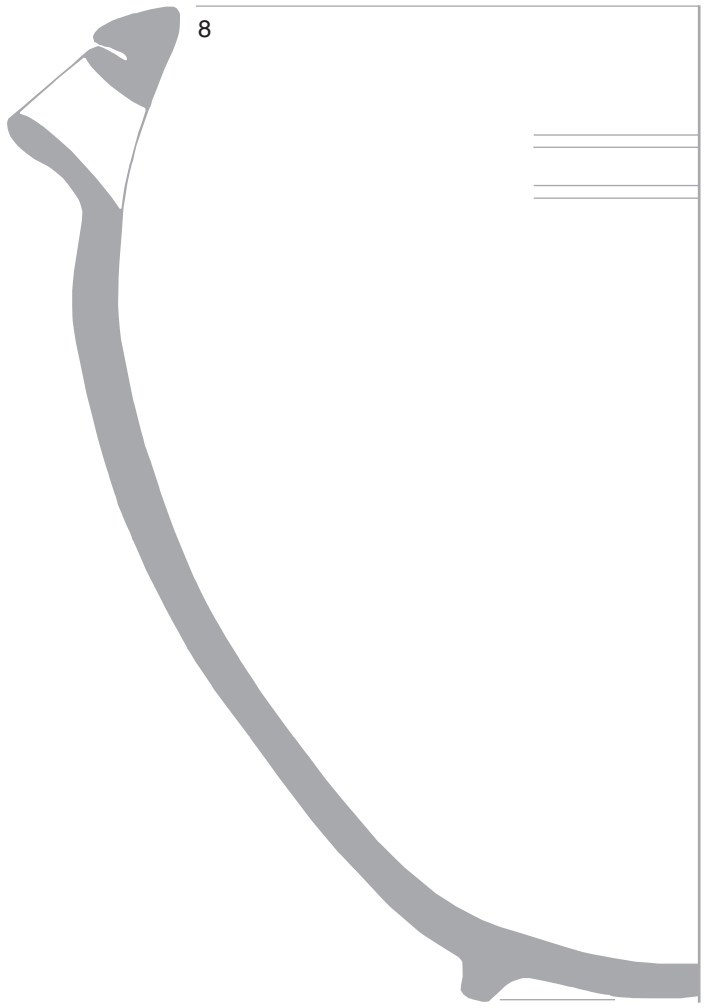





10 cm

(Photos at various scales)

8



7

S. A. P.

DIYALA

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45 A 3

50 A

—1500

—1600

—1700

—1800

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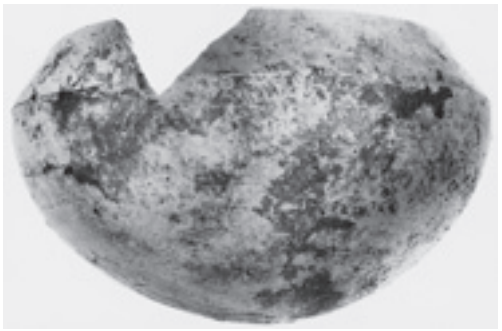

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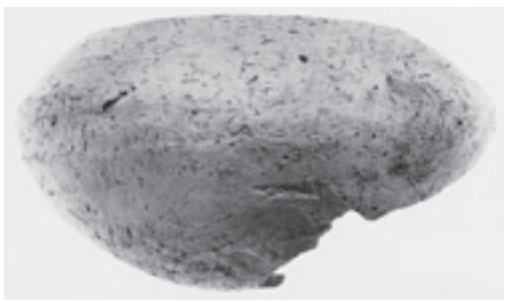

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11

NORTHERN ALLUVIAL PLAIN

NORTHERN ALLUVIAL PLAIN

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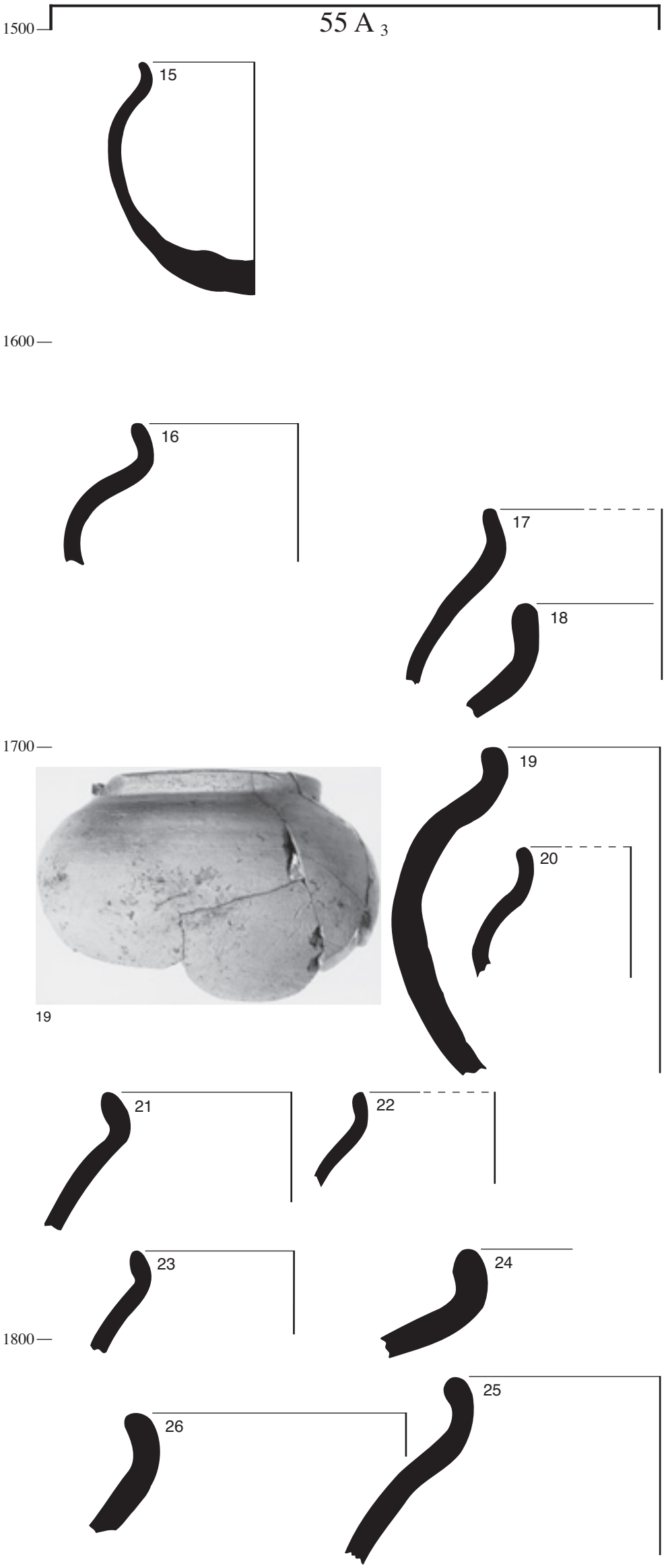



## 45 A 3

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 103672 | E | IIIe | 7.5YR 6/4 | ø rim : -. |
| 2 | D | 100001 | A | Ia | 10YR 6/4 | ø rim : 120. *TD* 1, Pl. 15 : 1. |
| 3* | D | 100188 | A | Ia-c | 10YR 7/2 | ø rim : ± 160. |
| 4* | D | 100557 | B | Ib-f | 5Y 7/3 | ø rim : ± 185. |
| 5* | D | 101822 | A | Ie | 5YR 6/6 | ø rim : 107. |
| 6* | D | 100465 | A | Ie-f[1)] | 10YR 7/2 | ø rim : -. *TD* 1, Pl. 15 : 2. |
| 7* | D | 100541 | A | Ii[1)] | 5Y 7/2 | ø rim : ± 108. *TD* 1, Pl. 15 : 3. |
| 8* | D | 103791 | A | IIe | 2.5YR 7/3 | ø rim : 132. |

## 50 A

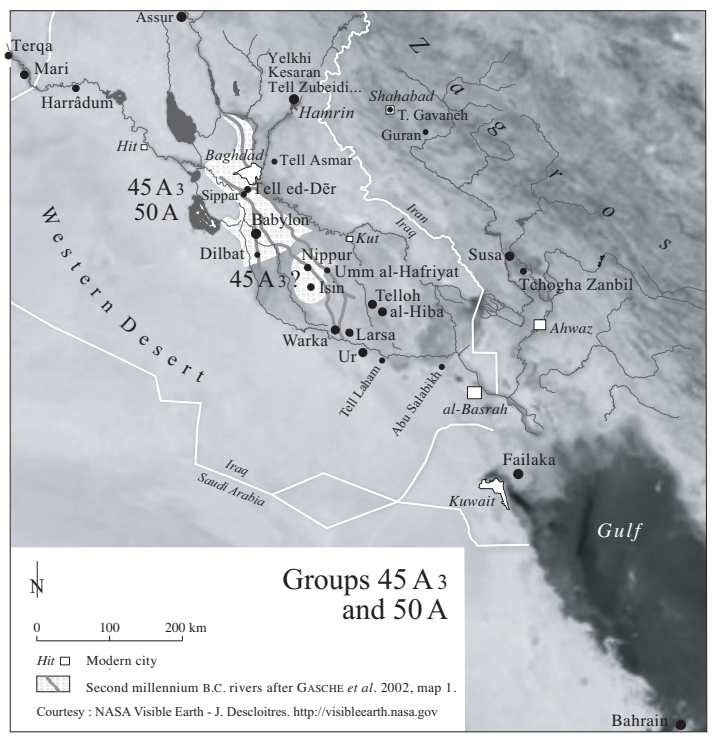
| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 9 | Dey | A 76.2 | B | II | 7.5YR 7/6 | ø rim : ± 130. ARMSTRONG 2001, fig. 8 : m. |
| 10* | D | 103663 | E | IIIe | 10YR 8/2 | ø rim : -. |
| 11* | D | 100113 | A | Ia | 5YR 6/4 | ø rim : ± 280. |
| 12* | D | 100195 | A | Ic[1)] | 7.5YR 6/4 | ø rim : ± 180. *TD* 1, Pl. 21 : 10. |
| 13* | D | 101021 | A | Ie | 5YR 6/6 | ø rim : ± 180. |
| 14* | D | 101607 | A | Ie | 10YR 7/3 | ø rim : ± 160. |

## 55 A 3

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 15 | Dey | A 92.1 | B | II | 7.5YR 7/6 | ø rim : 90. ARMSTRONG 2001, fig. 8 : l. |
| 16* | D | 103421 | E *sud* | IIc | 10YR 7/3 | ø rim : 130. |
| 17* | D | 101682 | A | Ic | 7.5YR 7/4 | ø rim : ± 140. *TD* 2, Pl. 23 : 2. |
| 18* | D | 100975 | A | Ic-e | 5YR 5/6 | ø rim : -. |
| 19* | D | 101598 | A | Ig | 5YR 6/4 | ø rim : 140. *TD* 2, Pl. 23 : 1. |
| 20* | D | 101521 | A | If | 7.5YR 6/4 | ø rim : ± 95 |
| 21* | D | 103552 | A | Ii | 7.5YR 7/4 | ø rim : 150. |
| 22* | D | 101789 | A | Ii | 7.5YR 6/4 | ø rim : ± 110. |
| 23* | D | 103535 | A | IIa | 10YR 7/2 | ø rim : 130. *TD* 4, Pl. 18 : 9. |
| 24* | D | 103557 | A | IIa | 7.5YR 6/4 | ø rim : -. *TD* 4, Pl. 18 : 12. |
| 25* | D | 102466 | A | IIc | 5Y 7/2 | ø rim : 170. *TD* 4, Pl. 15 : 13. |
| 26* | D | 102900 | A | IIb-c | 7.5YR 6/4 | ø rim : 220. |

1) See *TD* 2, 38 for the stratigraphical correction.

Continued on Pl. 50




10 cm

(Photos at various scales)

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—1600

55 A 3

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11

1

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—1800

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15

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18

—1900

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—2000

NORTHERN ALLUVIAL PLAIN

SOUTHERN ALLUVIAL PLAIN

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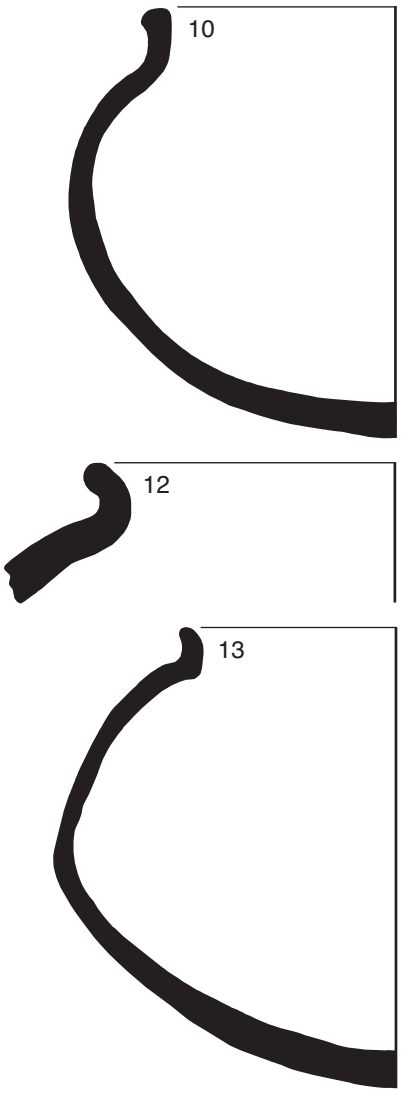
55 A 3

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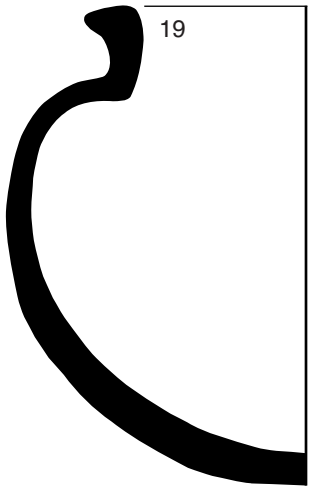


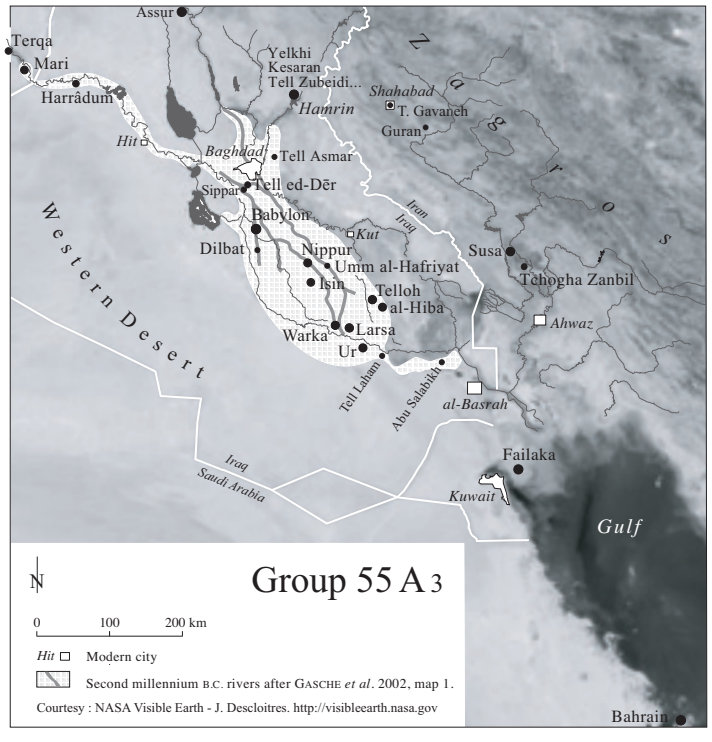

S. A. P. MIDDLE EUPHRATES

# PLATE 50

## 55 A 3

Continued from Pl. 49

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 101082 | A | Id | 5Y 8/1 | ø rim : -. |
| 2* | D | 100522 | A | Ig | 7.5YR 7/4 | ø rim : ± 200. |
| 3* | D | 100442 | A | Ig | 7.5YR 6/4 | ø rim : ± 120. |
| 4* | D | 101503 | A | Ii | 5YR 6/4 | ø rim : ± 160. |
| 5* | D | 109684 | A | IIc | 7.5YR 8/4 | ø rim : ± 115. |
| 6* | D | 109681 | A | IIe | 5YR 7/3 | ø rim : -. |
| 7* | D | 100631 | A | IIf-g | 7.5YR 6/4 | ø rim : ± 220. |
| 8* | D | 104180 | A | IVb | 2.5Y 7/4 | ø rim : ± 160. *TD* 4, Pl. 8 : 14. 2 incised marks (contents ?) |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 9 | N | 2P 235 | TB | E | light brown | ø rim : 210. *OIP* 78, Pl. 94 : 1. |
| 10 | N | A 2141 | WB | IV 6 | buff | ø rim : 133. |
| 11 | W | 20049c | Sînkāšid | 3 | *grünlich* | ø rim : 112. VAN ESS 1988a, fig. 12 : 97. |
| 12 | N | B 914 | WB | IV 1 | light buff | ø rim : 165. |
| 13 | H | 1 H 131 | B | - | greenish-buff | ø rim : 112. Burial 1HB 3. |
| 14 | N | B 714 | WA | VIA | reddish-buff | ø rim : ± 150. |
| 15 | U | 227 | A | II | - | ø rim : more than 200. |
| 16 | N | B 554 | WA | VIA | red | ø rim : ± 130. |
| 17 | N | H 689 : 4 | WF | VI | buff yellow | ø rim : 122. *OIP* 129, Pl. 116 : 16. |
| 18 | N | 2N 1055 | TB | IV 1 | tan | ø rim : 115. *OIP* 78, Pl. 90 : 4. |
| 19 | N | 17 N 61 | WC-3 | VA | buff | ø rim : 116. Burial 100 dug from VA. |
| MIDDLE EUPHRATES | | | | | | |
| 20* | M | III G1 NO4 | F | a | 10YR 8/3 | ø rim : 170. Burial III G1 NOT1. PONS 1999a, 162-163, Pl. 39 : 5 (No. 253442) = JEAN-MARIE 1999. 191, Pl. 226 : 8 (*tombe* 1060). SALLABERGER 1996, Pl. 4 : 2. |
| 21* | M | III E1 SE/2 | F | - | 5YR 8/3 | ø rim : 165. PONS 1999a, Pl. 39 : 3 (No. 253443). |




10 cm

(Photos at various scales)

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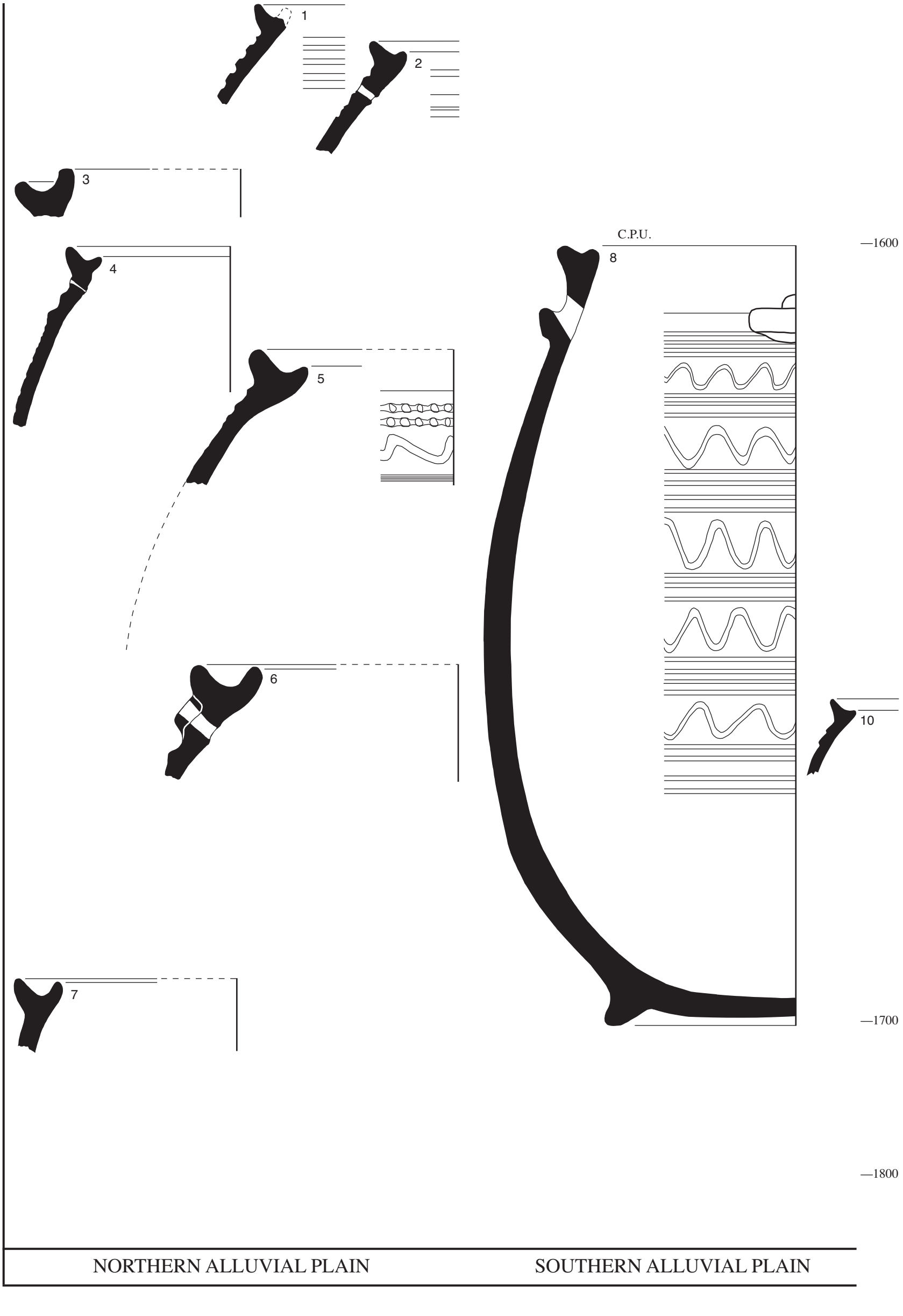
60 A




NORTHERN ALLUVIAL PLAIN

SOUTHERN ALLUVIAL PLAIN

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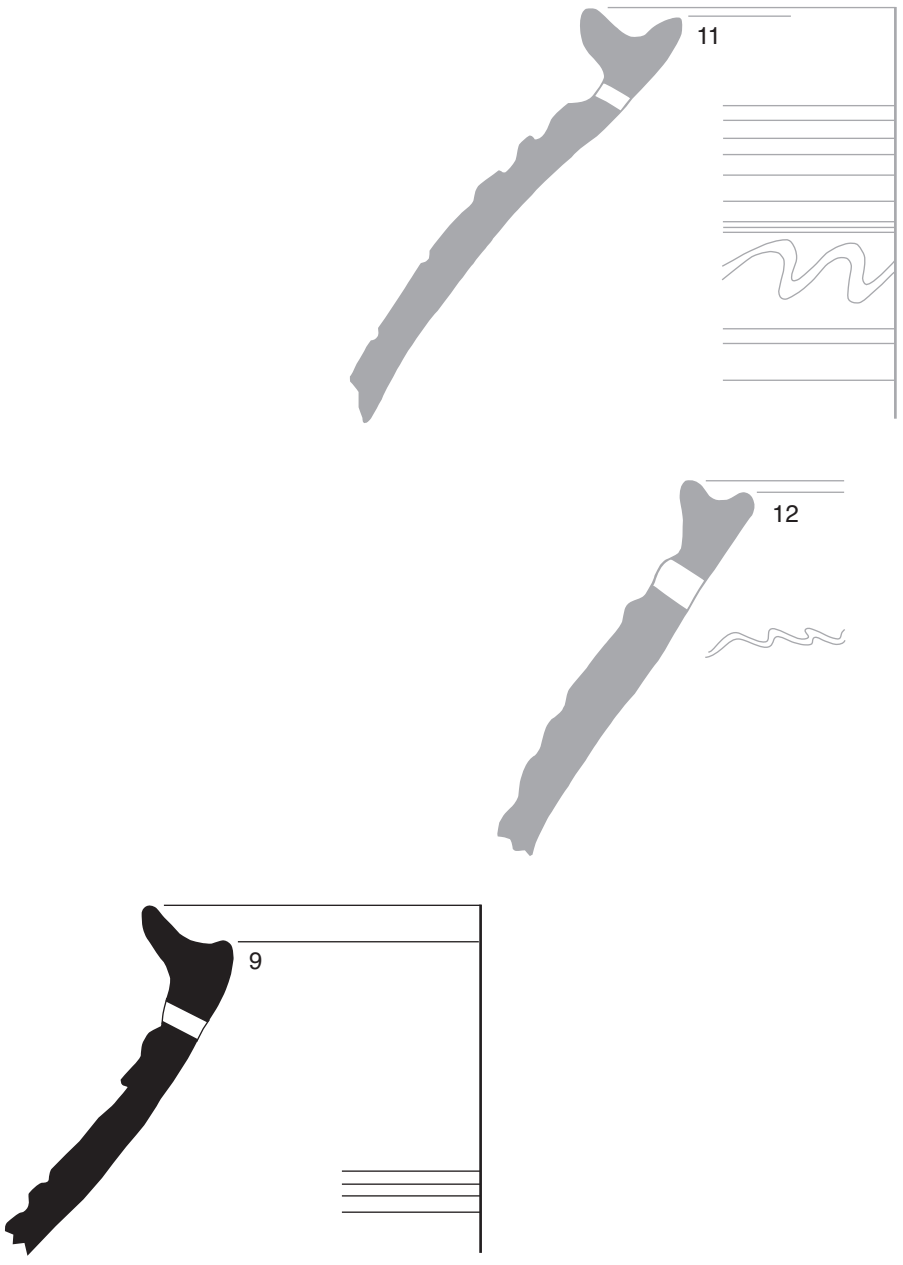
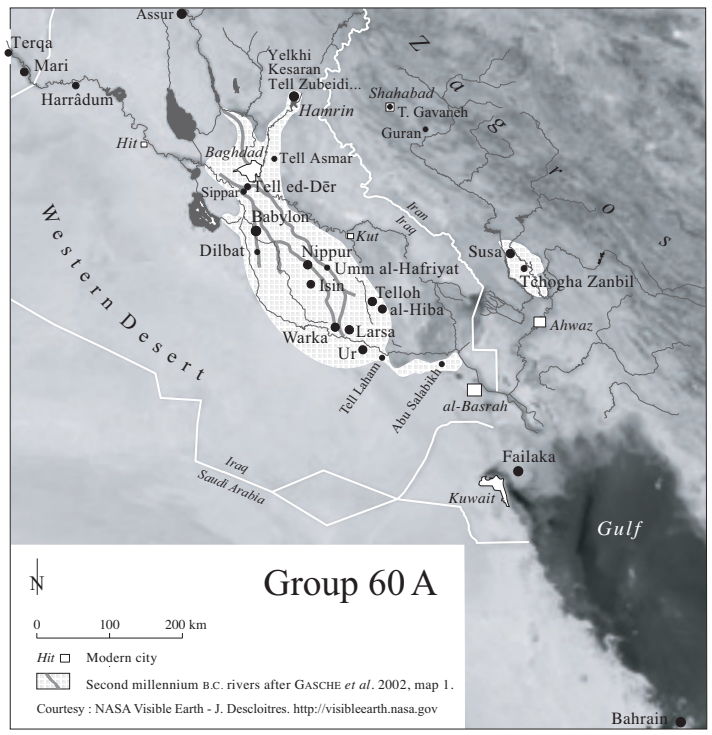



# PLATE 51

## 60 A

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 103212 | E | IIId | 10YR 7/3 | ø rim : -. Pit 20 dug from IIId. |
| 2* | D | 103385 | E | IIIe | 10YR 8/3 | ø rim : -. |
| 3* | D | 100735 | A | 0 | 7.5YR 6/4 | ø rim : ± 220. Pit 1 (cf. *TD* 2, Plan 6) now attributed to Ensemble 0. |
| 4* | D | 100387 | A | Ia | 5Y 7/3 | ø rim : 160. *TD* 1, Pl. 21 : 1. |
| 5* | D | 101099 | A | Ia-c | 7.5YR 7/4 | ø rim : ± 200. |
| 6* | D | 101109 | A | Ic | 10YR 7/4 | ø rim : ± 260. Pit 3 dug from Ic. |
| 7* | D | 101449 | A | If | 7.5YR 7/4 | ø rim : ± 220. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 8 | W | 20794 | Sînkāšid | 5 | *grün* | ø rim : 220. VAN ESS 1988a, fig. 21 : 142. |
| 9 | N | A 2001 | WB | IV 3 | pinkish-buff | ø rim : ± 180. |
| 10 | N | A 2001 | WB | IV 3 | buff | ø rim : -. |
| DIYALA | | | | | | |
| 11 | Yel | 60 | B | IIIb | *cuoio* | ø rim : ± 120. GABUTTI, 2002-03, Pl. 122 : 1. |
| 12 | Yel | 13 | B | IVa | *giallo-verdastro* | ø rim : ± 220. GABUTTI, 2002-03, Pl. 122 : 2. |

C.P.U. = Chronological Position Uncertain




10 cm

(Photos at various scales)

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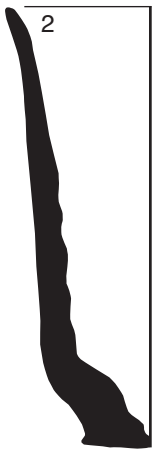

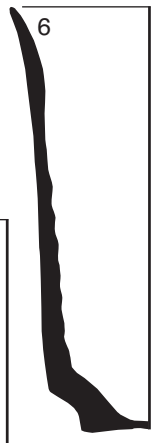

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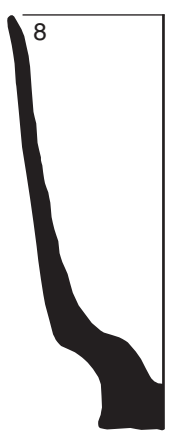
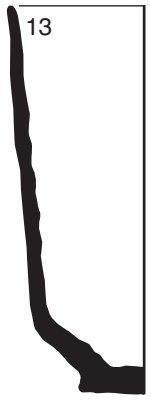
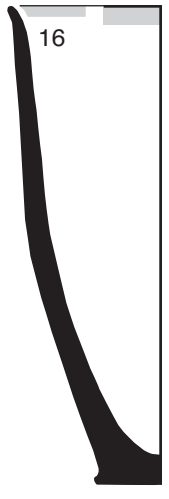


12



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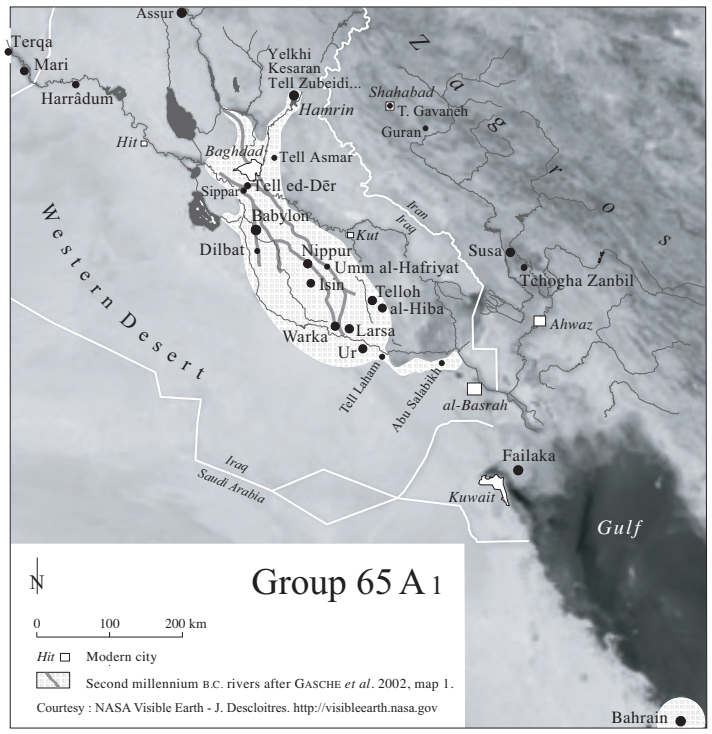
# PLATE 52

## 65 A 1

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 103998 | E | IIIb | 7.5YR 7/4 | ø rim : 85. *MHEM* 1, Pl. 30 : 1. |
| 2* | D | 107099 | E | IIId | 7.5YR 6/4 | *MHEM* 1, Pl. 30 : 5. |
| 3* | D | 107075 | E | IIIe | 7.5YR 7/4 | ø rim : 75. |
| 4* | D | 107097 | E | IIIf | 7.5YR 6/4 | ø rim : 72. *MHEM* 1, Pl. 30 : 4. (read IIIf instead of IIId). |
| 5* | D | 100269 | A | 0 | 7.5YR 6/4 S : 2.5Y 8/2 | ø rim : 49. |
| 6* | D | 105769 | E | VI | 7.5YR 7/4 | ø rim : 72. |
| 7 | D | 101319 | A | Ia | 2.5Y 8/2 | ø rim : 82. |
| 8* | D | 100583 | A | Ia | 7.5YR 6/4 | ø rim : 80. *TD* 1, Pl. 16 : 1. |
| 9* | D | 100246 | A | Ia | 10YR 7/2 | ø rim : 68. *TD* 1, Pl. 16 : 4. |
| 10* | D | 100218 | A | Ia-c | 5YR 6/4 | ø rim : 83. |
| 11* | D | 101738 | A | Ib | 5YR 5/4 | ø rim : 90. |
| 12* | D | 100838 | A | Id | 7.5YR 6/4 | ø rim : 76. |
| 13* | D | 101005 | A | Ic-e | 7.5YR 7/4 | ø rim : 72. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 14 | N | B 1025 | WB | IV 3 | buff S : cream | ø rim : 82. Painted band on exterior of rim. |
| 15 | W | 20029i | Sînkāšid | 3 [1)] | - | ø rim : 63. Disturbed Burial 50, under Room 16 of the palace. *AUWE* 10, Pl. 29 : i = VAN ESS 1988a, fig. 32 : 183. Redrawn from *UVB* 18, Pl. 24 : i. |
| 16 | N | 2P 243 | TB | I 2 | brownish S : buff | ø rim : 80. *OIP* 78, Pl. 95 : 19. Dark-painted band over rim. |
| DIYALA | | | | | | |
| 17 | Yel | y 363 | B | IVb | - | ø rim : 80. Unpublished. Data supplied by G. Bergamini. |

1) See Pl. 8, note 2). In VAN ESS (1988a, 329), this vessel is also attributed to *Stratigraphische Einheit 0* (*nicht zuweisbar*).




10 cm

(Photos at various scales)

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—1500

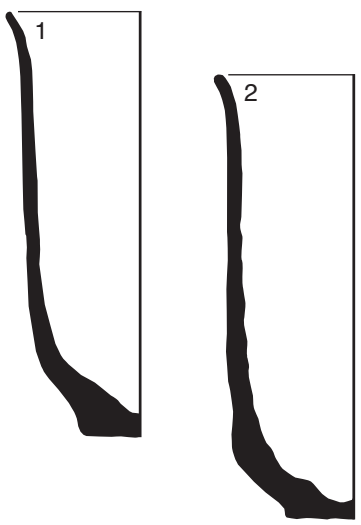
65 B 1

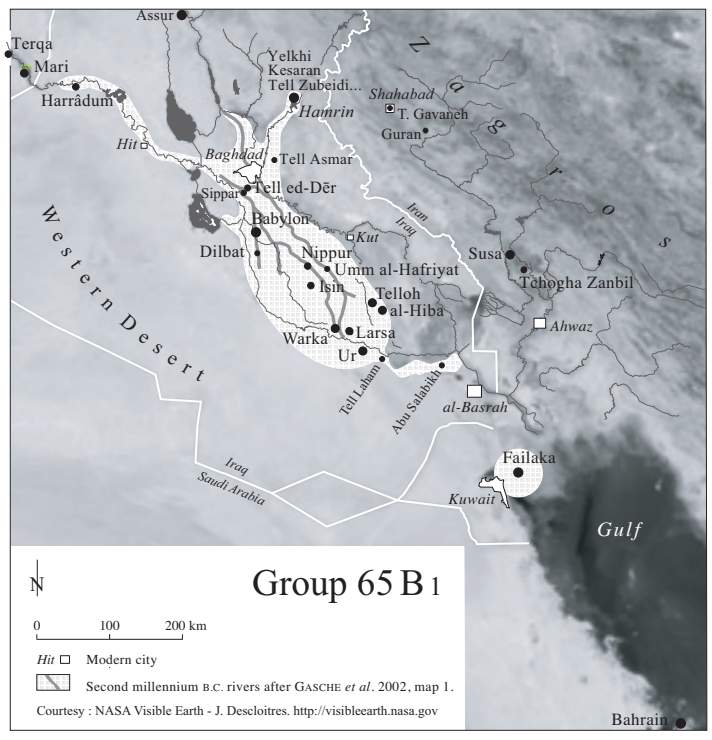
65 C 1

1

6

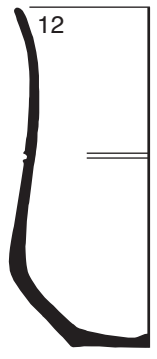
—1600



12

—1700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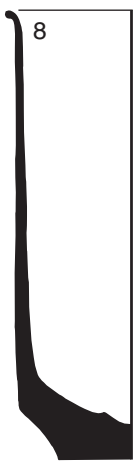
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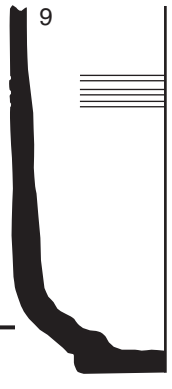
9

—1800

N. A. P.

S. A. P.

N. A. P.

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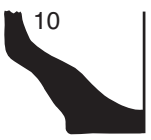
# PLATE 53

## 65 C 1

10



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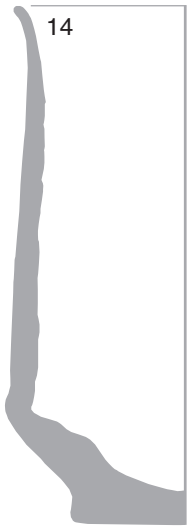

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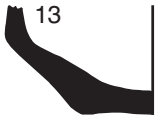


13

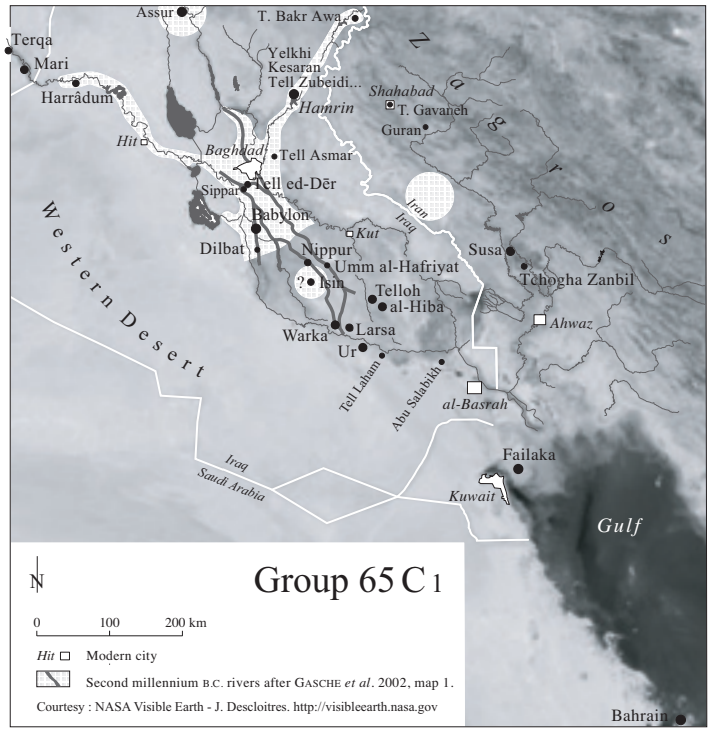
## 65 B 1

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 100959 | A | Ic-d | 5Y 8/2 | ø rim : 70. SALLABERGER 1996, Pl. 1 : 14. |
| 2 | D | 100942 | A | Id | 10YR 7/4 | ø rim : 72. *TD* 2, Pl. 20 : 1. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 3 | N | 2103+ 2138 | WB | IV 6 | pink buff | ø rim : 80. |
| 4 | W | 20029m | Sînkāšid | 3 [1)] | - | ø rim : 70. Disturbed Burial 50, under Room 16 of the palace. *AUWE* 10, Pl. 29 : m = VAN ESS 1988a, fig. 36 : 208. |
| 5 | N | B 174 | WB | IV 3 | buff | ø rim : 80. FRANKE 1978, fig. 59 : 4b. |
| 6 | N | 12 N 435 | WB | IV 3 | pinkish-buff | ø rim : 72. |
| 7* | L | 27.573 | *Mais*. 27 | - | 7.5YR 7/4 | ø rim : -. Burial under Room 3. Exc. Huot. CALVET 2003, fig. 58. Redrawn. |
| 8 | N | 2N 917 | TB | II 2 | tan | ø rim : 65. *OIP* 78, Pl. 89 : 2. |
| 9 | U | 218 | A | II | pink S : cream | ø rim : -. |

## 65 C 1

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 10* | D | 100136 | A | 0 | 7.5YR 6/4 S : 2.5Y 7.5/2 | ø rim : -. |
| 11* | D | 101616 | A | Ie | 7.5YR 6/4 | ø rim : -. |
| 12 | D | 102846 | A | Ii | 10YR 8/3 | ø rim : 73. |
| 13* | D | 100646 | A | Ii | 10YR 8/2 S : 10YR 7.5/2 | ø rim : -. |
| MIDDLE EUPHRATES | | | | | | |
| 14 | Din | V 257 | *Bât*. 2 | $3B_1$ | *beige* | ø rim : 90. *Haradum* 1, fig. 87 : 13. |
| DIYALA | | | | | | |
| 15 | Yel | y 248 | B | IIIb-IVa | *cuoio* | ø rim : 89. GABUTTI 2002-03, Pl. 62 : 5. |
| 16 | Yel | y.138 | B | Vb | *cuoio rosato* | ø rim : 72. GABUTTI 2002-03, Pl. 62 : 4. |

1) See Pl. 8, note 2).




10 cm

(Photos at various scales)

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—1550

# 65 C 2

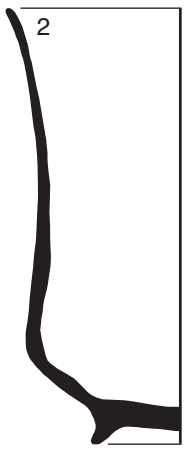
—1600

—1700

—1750

1

1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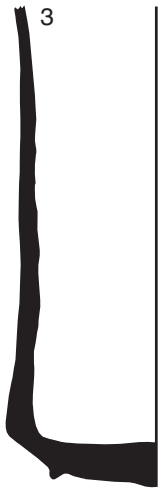
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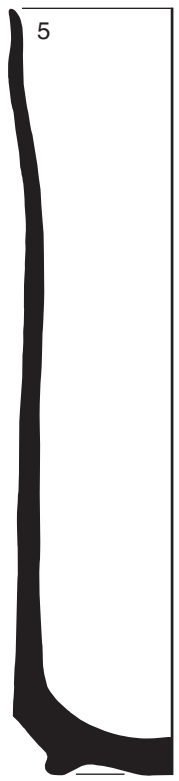
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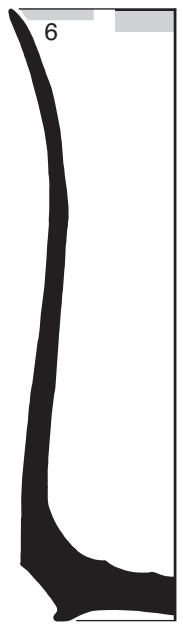
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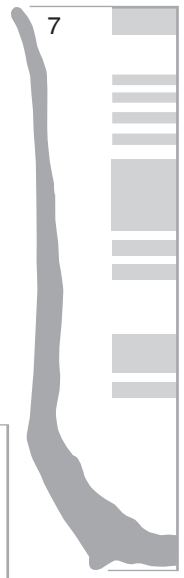
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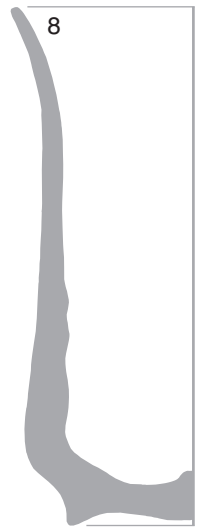
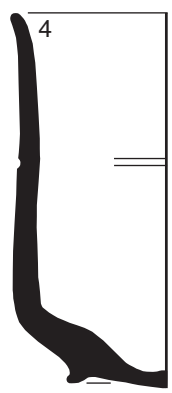

8

9

8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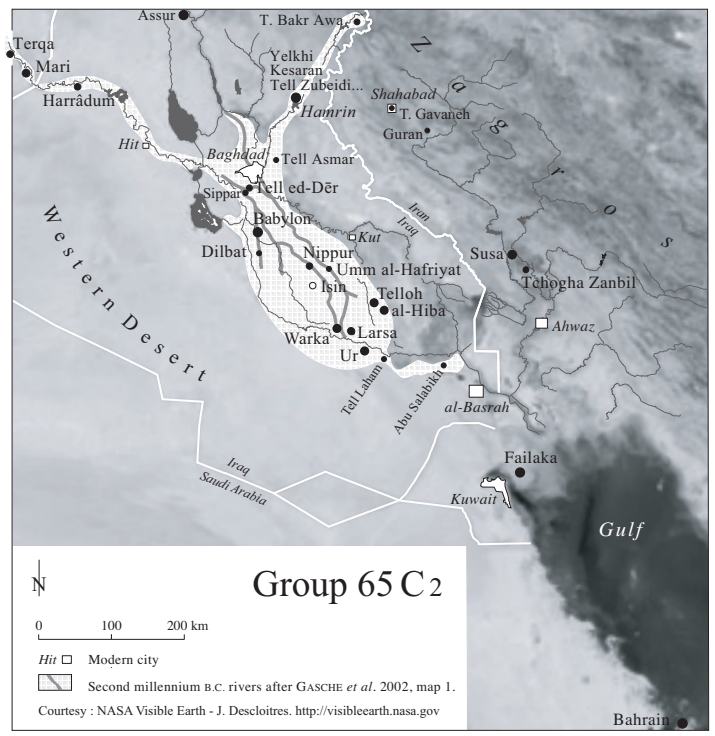
4



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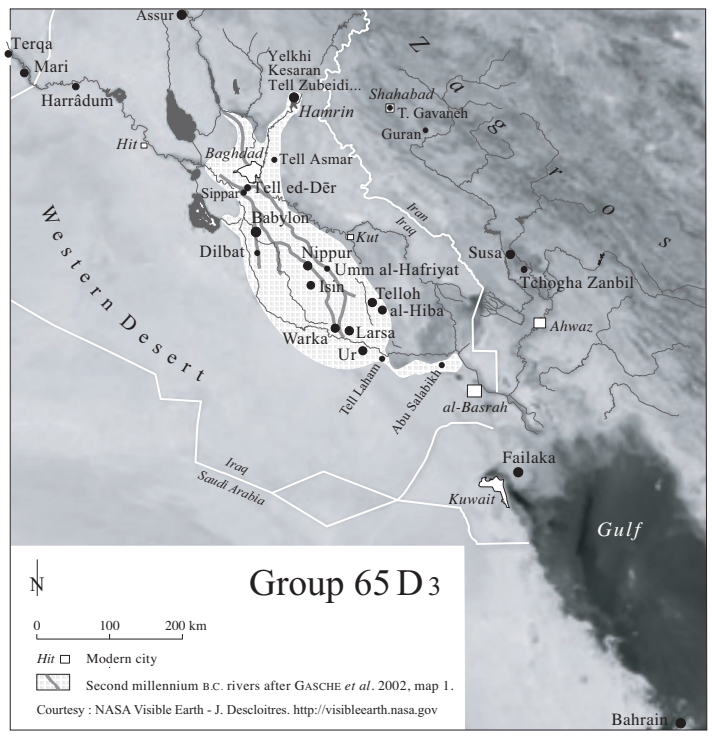
# PLATE 54

## 65 C 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 101045 | A | Ia | 7.5YR 6/4 | ø rim : -. *TD* 2, Pl. 20 : 2. |
| 2* | D | 101276 | A | Ic | 7.5YR 7/4 | ø rim : 87. *TD* 2, Pl. 20 : 3. SALLABERGER 1996, Pl. 1 : 15. |
| 3* | D | 100933 | A | Id-e | 7.5YR 7/4 | ø rim : -. |
| 4 | D | 100553 | A | Ii | 10YR 7/4 S : 10YR 8/3 | ø rim : 82. Burial D.7 dug from Ii. *TD* 1, Pl. 16 : 11. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 5 | N | 3P 204 | TA | X | beige/buff S : buff | ø rim : 84. *OIP* 78, Pl. 95 : 7. |
| 6 | N | 2P 231 | TB | I 1 | brownish S : buff | ø rim : 85. *OIP* 78, Pl. 95 : 6. Dark-painted band over rim. |
| , | | | | | | |
| MIDDLE EUPHRATES | | | | | | |
| 7 | Din | V 163 | *Bât.* 2 | $3B_1$ | *rose orangé* | ø rim : 86. *Haradum* 1, fig. 87 : 14. Red-painted horizontal bands on exterior. |
| 8* | Din | V 421 | *Bât.* 10 | 3C | 2.5Y 8/2 | ø rim : 95. *Haradum* 1, fig. 87 : 7. Redrawn. |
| 9 | Din | V 474 | *Bât.* 6 | 3C | *rose* | ø rim : 71. *Haradum* 1, fig. 87 : 9. |

## 65 D 3

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 10* | D | 100667 | A | Ig | 5Y 8/4 | ø rim : 80. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 11 | L | 49.3 | J VIII | 3 | - | ø rim : 84. Shape reconstructed. Exc. Huot 1970. MINSAER 1990, Pl. 14 : e-f. CALVET *et al.* 2003, figs. 16 : e, g. |
| DIYALA | | | | | | |
| 12 | Yel | y 453 | B | IVb | *cuoio* | ø rim : 72. GABUTTI 2002-03, Pl. 62 : 2. |
| 13 | Yel | HY 389 | B | Vb | *cuoio* | ø rim : 77. GABUTTI 2002-03, Pl. 62 : 1. |




10 cm

(Photos at various scales)

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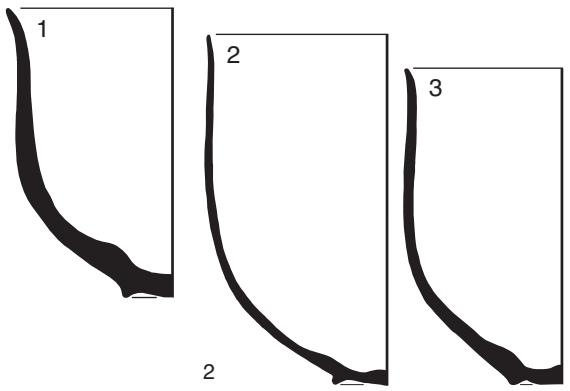
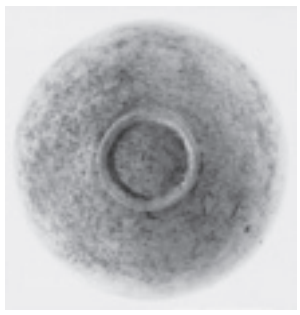
—1500

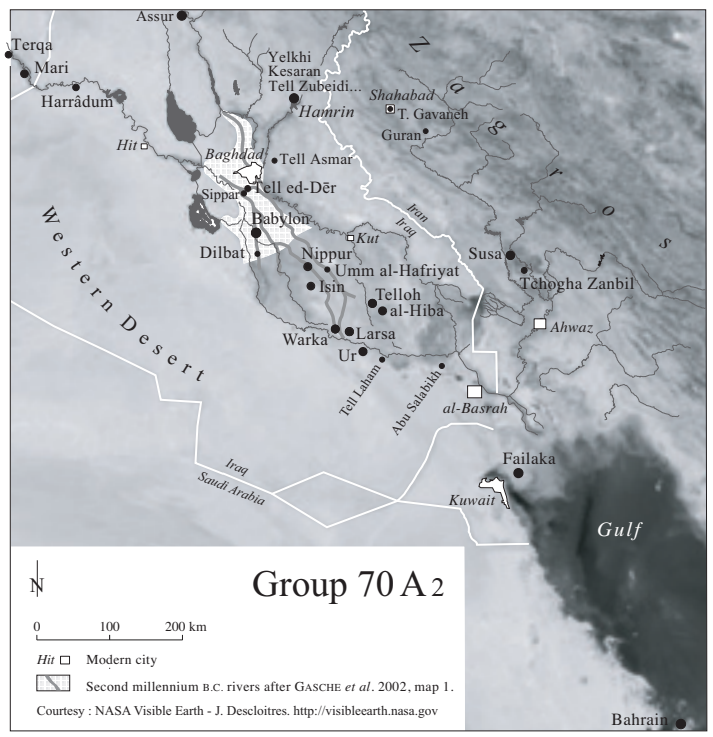
## 70 A 2

## 70 B 2

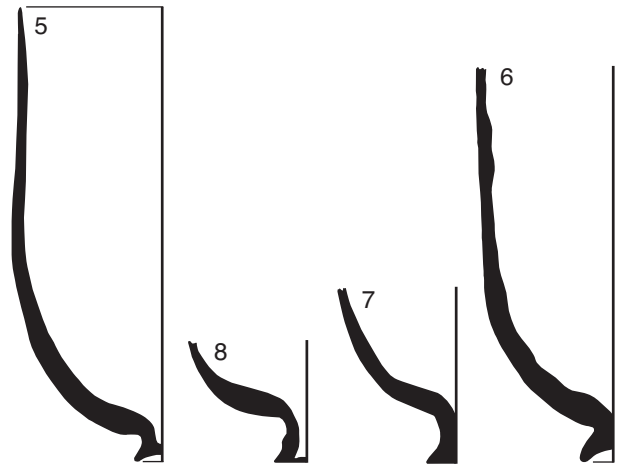




—1600




C.P.U.




—1700

—1800

NORTHERN ALLUVIAL PLAIN

SOUTHERN ALLUVIAL PLAIN

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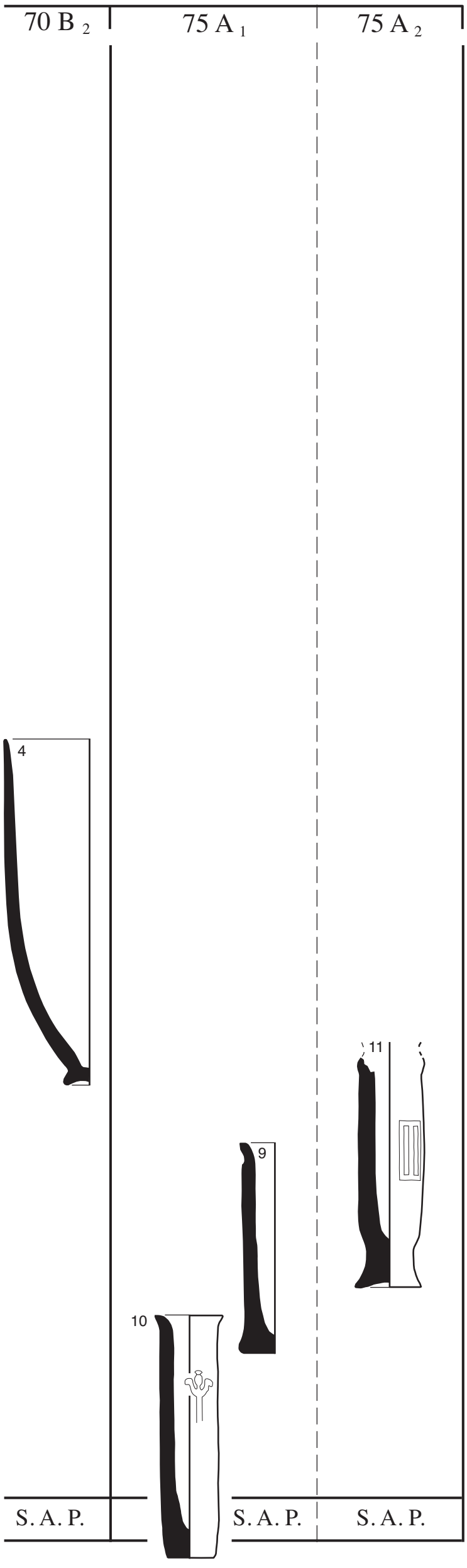



## 70 A 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 106888 | E | IIIa | 10YR 5/1 | ø rim : 86. |
| 2 | D | 105823 | E | IIId | 10YR 8/3 | ø rim : 93. Burial D.328 dug from IIId. *MHEM* 1, Pls. 16 and 30 : 15. SALLABERGER 1996, Pl. 1 : 13. |
| 3 | D | 104392 | E | IIId | 10YR 7/3 | ø rim : 81. Burial D.272 dug from IIId. *MHEM* 1, Pls. 21 and 30 : 16. |

## 70 B 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 4 | I | IB 1576 | *NOA* 1 | 6,59m | 7.5YR 8/6 S : 10YR 8/3 | ø rim : 70. Burial 114. *Isin* 3, 72, Pl. 26 : 13 ; we disagree with the Kassite dating of this vessel suggested in *Isin* 3, 19. |
| 5 | L | L. 389 | - | - | 10YR 8/3 | ø rim : 66. Burial 115. Exc. Parrot, 1933. Louvre, AO 17015. Drawn at the Louvre. PARDO 1979, Pl. 19. SALLABERGER 1996, Pl. 1 : 16. |
| 6 | N | B 1023 | WB | IV 4 | reddish | ø rim : -. FRANKE 1978, fig. 60 : 6. |
| 7* | L | 59.74 | *Mais.* 59 | *Sols* | 10YR 8/4 | ø rim : -. Exc. Huot. CALVET 2003, fig. 64. Redrawn. |
| 8* | L | 59.75 | *Mais.* 59 | *Sols* | 7.5YR 7/4 | ø rim : -. Exc. Huot. CALVET 2003, fig. 64. Redrawn. |

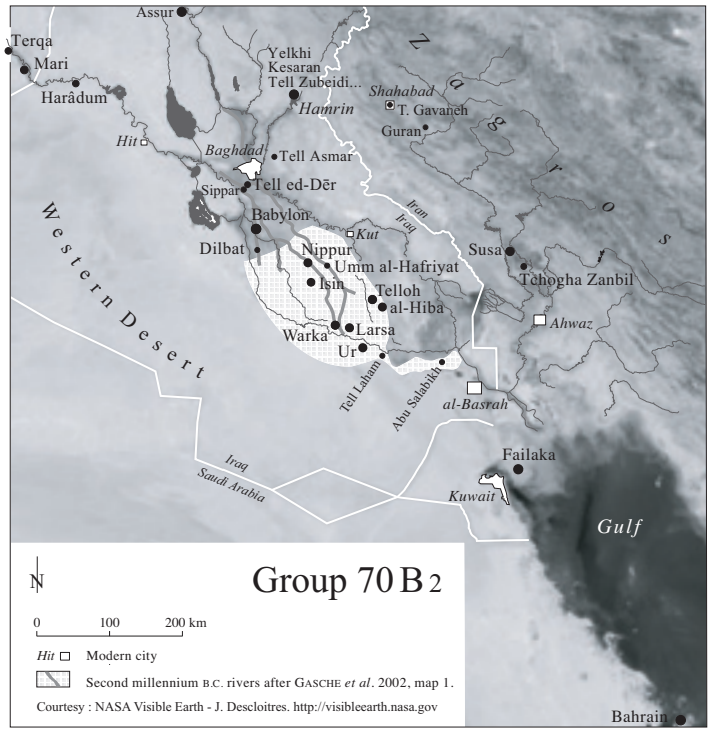
## 75 A 1

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 9 | N | 12 N 737 | WA | V | buff | ø rim : 29. GIBSON 1978, fig. 16 : 1. |
| 10 | N | 2N 996 | TB | III 1 | *tan* | ø rim : 29. *OIP* 78, Pl. 91 : 8. |

## 75 A 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 11 | N | 2N 997 | TB | I 2 | *tan* | ø rim : 29. *OIP* 78, Pl. 91 : 9. |

C.P.U. = Chronological Position Uncertain




10 cm

(Photos at various scales)

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—1500

80 A 1

80 A 2

1

2

4

4

5

7

8

9

N. A. P.

NORTHERN ALLUVIAL PLAIN

—1600

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# PLATE 56

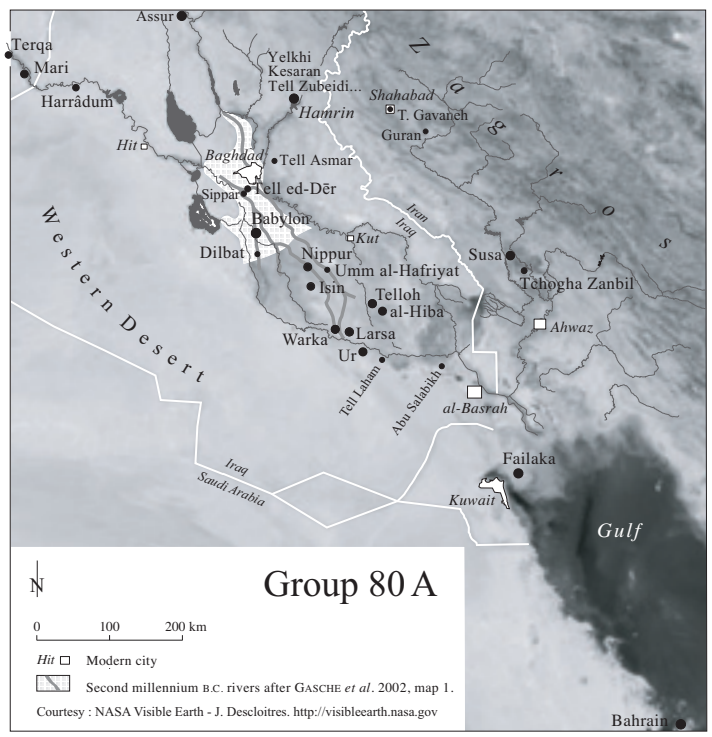
## 80 A 2

## 80 A 1

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | D | 104061 | E | IIId | 10YR 8/2 | ø rim : 119. Burial D.261 probably dug from IIId. *MHEM* 1, Pls. 17 and 31 : 4 (read D 4061 instead of 4062). |

## 80 A 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 2* | D | 105811 | E | IIIb | 2.5Y 8/2 | ø rim : 104. Burial D.326 dug from IIIb. *MHEM* 1, Pls. 24 and 31 : 2. |
| 3 | D | 104394 | E | IIId | 5YR 5/6 | ø rim : 120. Burial D.272 dug from IIId. *MHEM* 1, Pls. 21 and 31 : 8. |
| 4 | D | 107890 | F | 0 | 5YR 7/4 | ø rim : 98. *NAPR* 3, Pl. 6 : 5. |
| 5 | D | 104062 | E | IIId | 5YR 6/6 | ø rim : 123. Burial D.261 probably dug from IIId. *MHEM* 1, Pls. 17 and 31 : 1 (read D 4062 instead of 4061). SALLABERGER 1996, Pl. 2 : 5. |
| 6 | D | 104449 | E | IIId | 10YR 7/3 | ø rim : 105. Burial D.276 dug from IIId. *MHEM* 1, Pls. 15 and 31 : 7. |
| 7* | D | 105706 | E | IIId | 10YR 7/3 | ø rim : 138. Burial D.319 dug from IIId. *MHEM* 1, Pls. 21 and 31 : 5. |
| 8* | D | 107807 | E | IIIe | 7.5YR 7/4 | ø rim : -. Filled-in base. |
| 9* | D | 107806 | E | IIIe | 7.5YR 6/8 | ø rim : -. Filled-in base. |




10 cm

(Photos at various scales)

NORTHERN ALLUVIAL PLAIN

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85 A 2

85 B 1

85 B 2

85 C 2

—1550

—1600

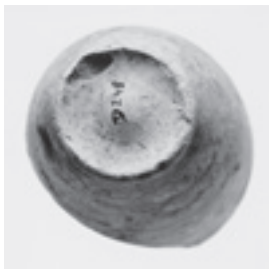
—1700

—1800

1

2

3



3

4

4

5

6

6

7

8

C.P.U.

9

10

11

N. A. P.

S. A. P.

S. A. P.

S. A. P.

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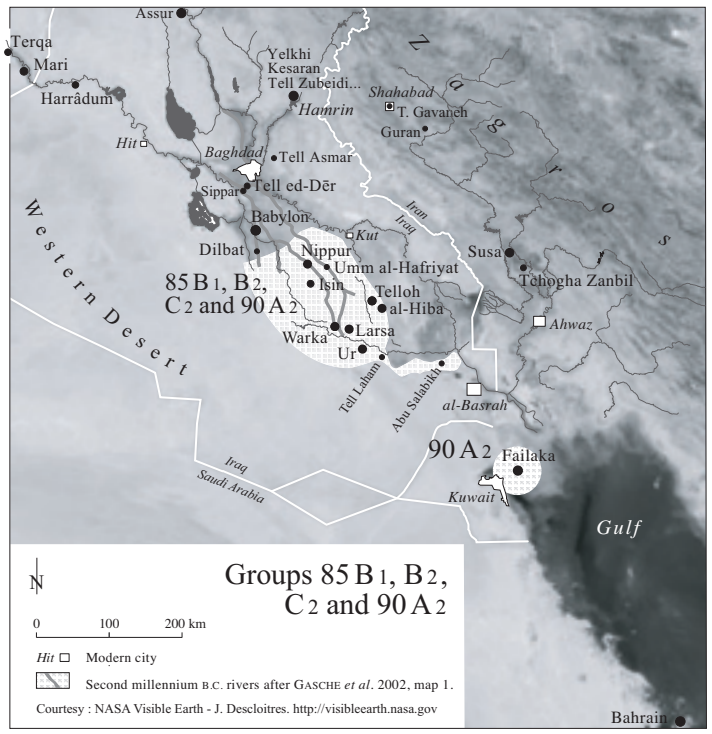
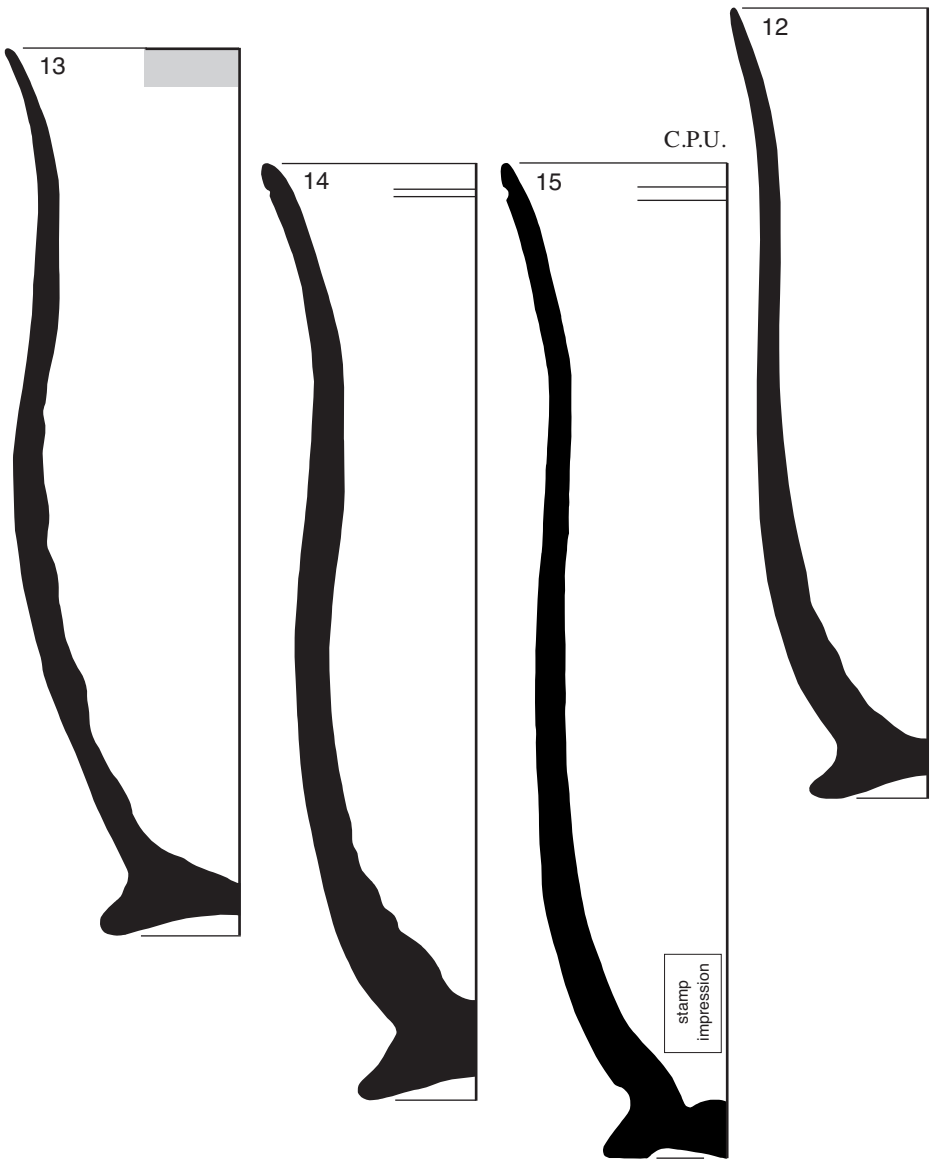
## 90 A 2




1600—




## 85 A 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 103476 | E | IIId | 10YR 7/3 | ø rim : -. |
| 2* | D | 103500 | E | IIIe | 5YR 6/6 | ø rim : -. |
| 3* | D | 100248 | A | Ia | 5YR 6/6<br>S : 2.5Y 7.5/2 | ø rim : -. |
| 4 | D | 100353 | A | Ic | 5YR 6/4 | ø rim : 75. *TD* 1, Pl. 18 : 3. [1]<br>SALLABERGER 1996, Pl. 2 : 1. |
| 5* | D | 101015 | A | Ie | 7.5YR 6/4 | ø rim : 75. *TD* 2, Pl. 20 : 5. |
| 6 | D | 101903 | A | Ig | 5YR 6/4 | ø rim : 68. |
| 7* | D | 101038 | A | Ik | 7.5YR 6/4 | ø rim : -. |

## 85 B 1

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 8 | N | 12 N 723 | WB | IV 2 | buff | ø rim : 81. Dark-painted band on exterior of rim. FRANKE 1978, 92. |
| 9 | L | L. 698 | *F.S.* | - 6,30m | - | ø rim : 68. Exc. Parrot, 1967. PARROT 1968, fig. 15 ( = CALVET *et al.* 2003, fig. 31 : j).<br>The same ID no. was given to our Pl. 106 : 8. |

## 85 B 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 10 | W | 15184b | Pb 13-1 | - | *braungrau* | ø rim : 74. Burial 44. *AUWE* 10, Pl. 23 : b = VAN ESS 1988b, fig. 6 : 26. |

## 85 C 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 11 | I | - | *WA* III<br>*Areal* IX | - | *braun*<br>S : *hellgrau* | ø rim : 80. Dark-painted band over rim. *Isin* 4, 101, Pl. 55 : 17. |

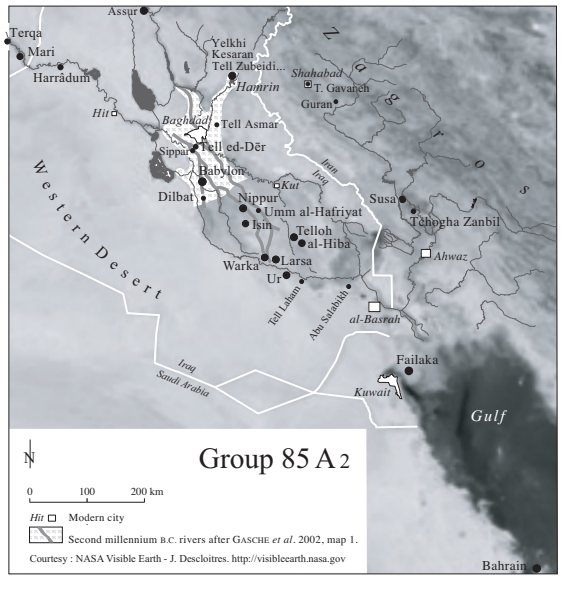
## 90 A 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 12 | I | IB 1444 | *NOA* I | 7.14m | 5Y 7/3 | ø rim : 106. |
| 13 | N | A 2001 | WB | IV 3 | buff | ø rim : 122. Dark-painted band on exterior of rim. |
| 14* | L | 27.546 | *Mais*. 27 | - | 5YR 7/6 | ø rim : 104. Burial under Room 3 of Mais. 27. Exc. Huot. CALVET 2003, fig. 57. Redrawn. |
| 15 | L | L. 539 | *F.S.* | - 4,80 | - | ø rim : 119. Exc. Parrot, 1967. PARROT 1968, fig. 18 and 19. |

1) See *TD* 2, 38 for the stratigraphical correction.

C.P.U. = Chronological Position Uncertain

Continued on Pl. 58




10 cm

(Photos at various scales)

1700—

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—1600

90 A 2

90 B 2

C.P.U.

1

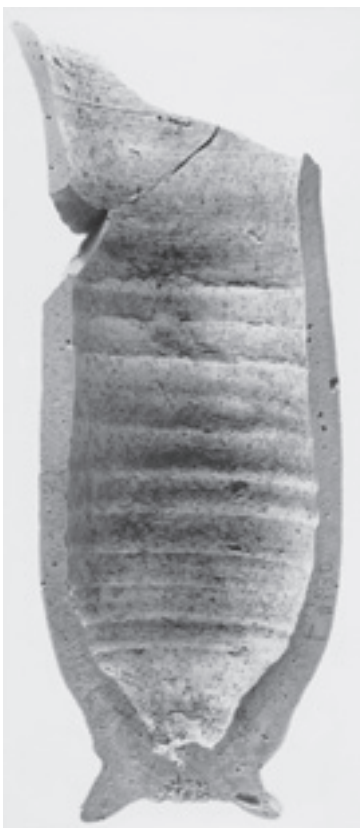
2

3

4

C.P.U.

stamp impression



2

5

5 C.P.U.

6 C.P.U.

7

—1700

SOUTHERN ALLUVIAL PLAIN

SOUTHERN ALLUVIAL PLAIN

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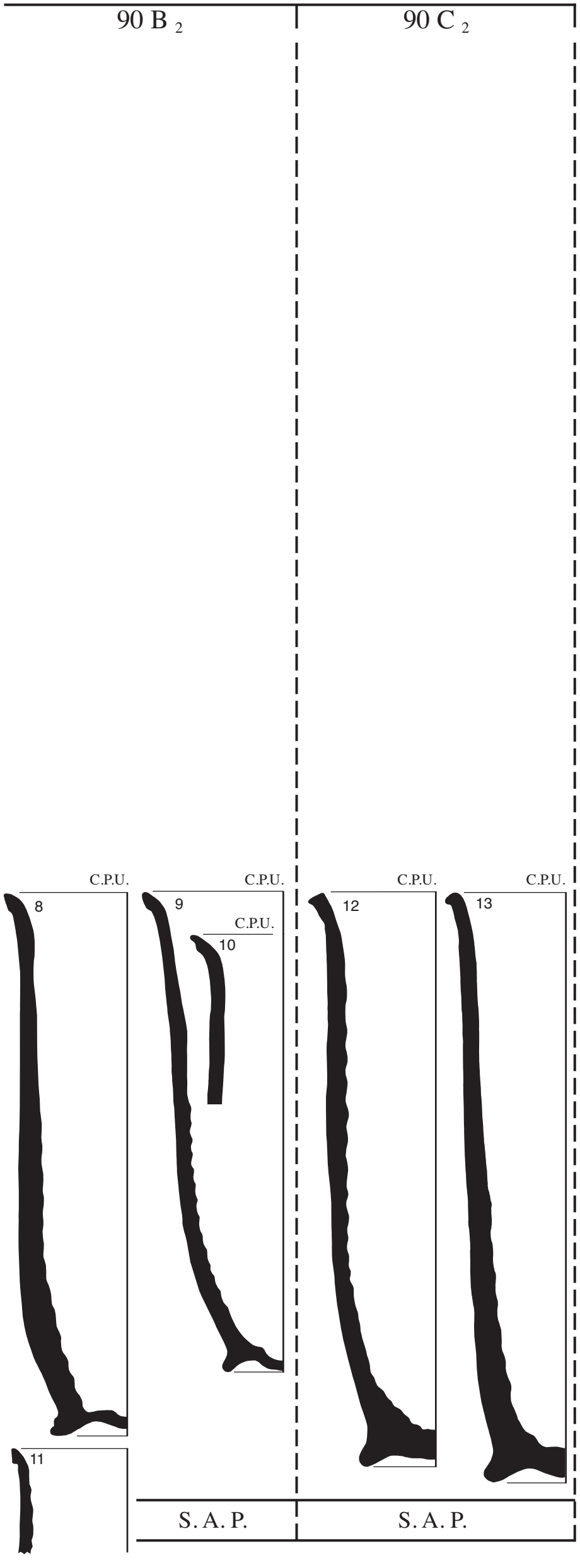
# PLATE 58




## 90 A 2

Continued from Pl. 57

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | W | 20802 | Sînkāšid | 5 | - | ø rim : 80. VAN ESS 1988a, fig. 35 : 202. |
| 2* | L | 59.44 | *Mais.* 59 | - | 2.5Y 8/2 | ø rim : 106. Patched base. Exc. Huot. Redrawn. |
| 3 | H | 1HP 517 | B | - | - | ø rim : 90. |
| 4 | L | L. 548 | *F.S.* | - | *chamois* | ø rim : -. Patched base. Exc. Parrot, 1967. Louvre, AO 22513. For the inscription, see ARNAUD 1983, 250 and 290 : 3. |

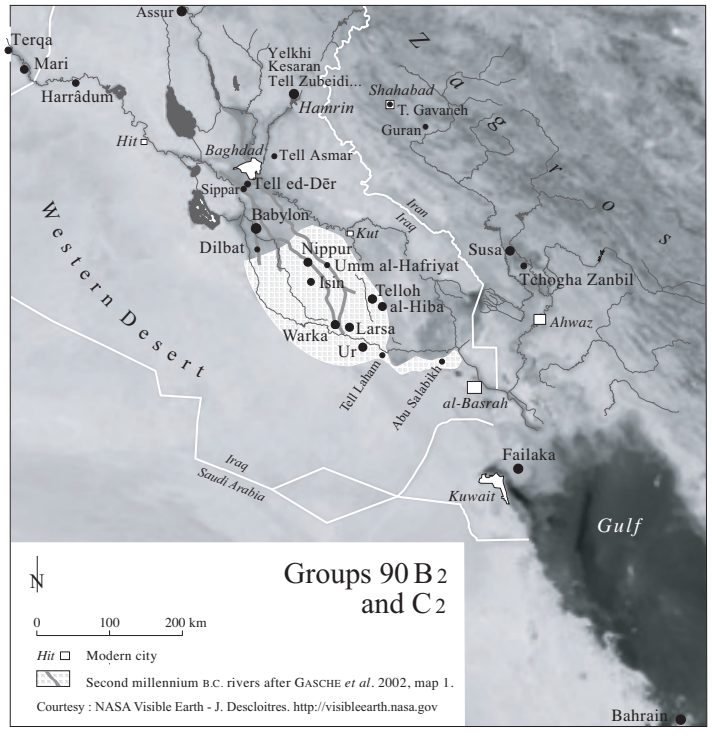
## 90 B 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 5 | L | L. 403 | *F.S.* | - | 5Y 8/3 | ø rim : 104. Exc. Parrot, 1933. Louvre, AO 17052. Drawn at the Louvre. |
| 6 | T | T. 134 | - | - | S : *beige* | ø rim : 104. Plugged Base. Exc. Parrot, 1931-32. Louvre, AO 15205. Drawn at the Louvre. *MHEM* 4, Pl. 1 : 26. |
| 7 | W | 15184a | Pb 13-1 | - | *hellgrau* | ø rim : 93. Burial 44. *AUWE* 10, Pl. 23 : a = VAN ESS 1988b, fig. 6 : 25. |
| 8 | L | L. 700 | *F.S.* | - 8m | 10Y 8/3 | ø rim : 104. Exc. Parrot, 1967. PARROT 1968, fig. 15 = CALVET *et al*. 2003, fig. 31 : i. |
| 9 | L | L. 701 | *F.S.* | - 7,90m | *beige* | ø rim : 117. Exc. Parrot, 1967. PARROT 1968, fig. 15 = CALVET *et al*. 2003, fig. 31 : h. Louvre, AO 22594. |
| 10 | T | TG. 3902 | - | - | - | ø rim : 100. Exc. de Genouillac 1929-31. Louvre, AO 12493. Drawn at the Louvre. DE GENOUILLAC 1936, Pl. XXXIV. Detail of rim. Axis not shown. |
| 11 | L | - | J VIII | 3 | - | ø rim : 98. Exc. Huot, 1970. CALVET *et al*. 2003, fig. 16 : f. |

## 90 C 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 12 | Ur | U.6226 | EH | - | - | ø rim : 102. Unpublished Burial G.37. Drawn at U. of Penn. Museum. |
| 13 | T | TG. 1797 | - | - | *rosée* | ø rim : 104. Exc. de Genouillac 1929-31. Louvre, AO 11853. Drawn at the Louvre. |

C.P.U. = Chronological Position Uncertain




10 cm

(Photos at various scales)

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90 D 2

95 A 1

1

2

2

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4

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6

6

—1700

5

10

11

S. A. P.

NORTHERN ALLUVIAL PLAIN

—1800

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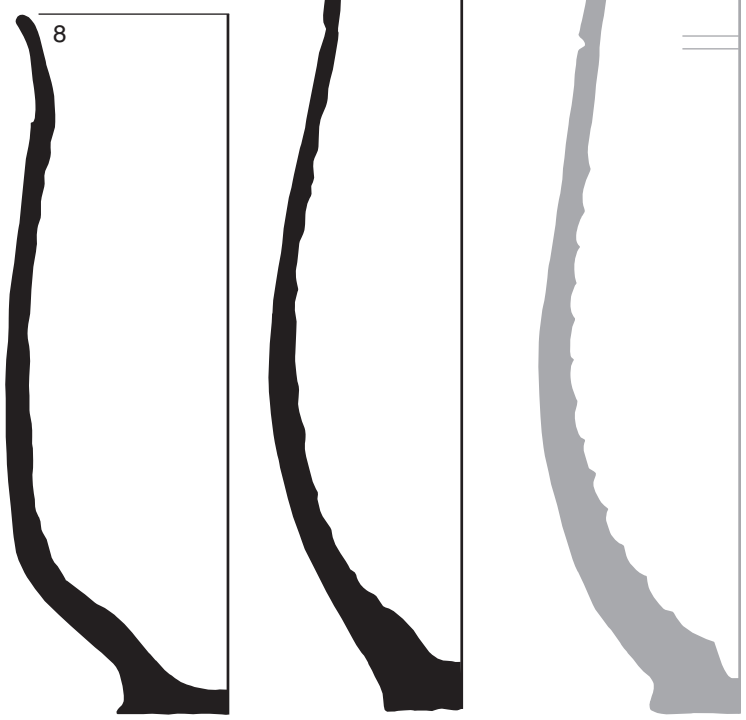
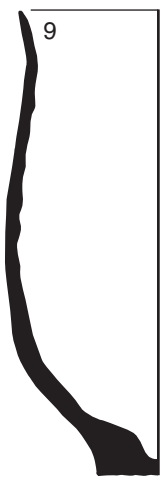
# PLATE 59

8




## 90 D 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | W | 20042 | Sînkāšid | 4 | *rot*<br>S : *hellgelb* | ø rim : 89. VAN ESS 1988a, fig. 30 : 175. |

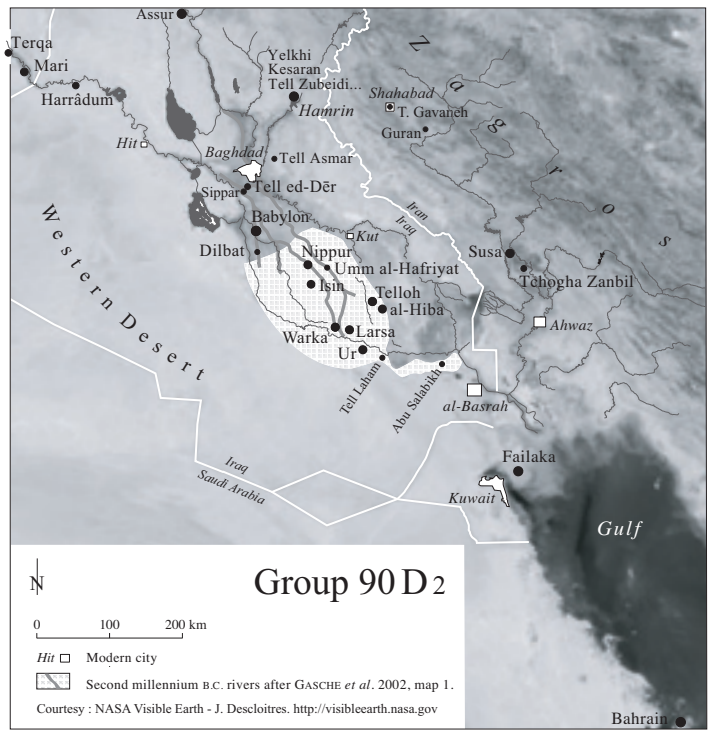
## 95 A 1

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN [1] | | | | | | |
| 2* | D | 101391 | A | Ic | 10YR 7/4 | ø rim : 92. |
| 3 | D | 101228 | A | Ic | 5YR 6/6 | ø rim : 72. |
| 4 | D | 101280 | A | Ic | 7.5YR 6/4 | ø rim : 100. |
| 5* | D | 101874 | A | Ie | 7.5YR 6/4 | ø rim : 113. Burial D.89 probably dug from Ie. SALLABERGER 1996, Pl. 2 : 2. |
| 6 | D | 101440 | A | Ie | 5YR 7/6 | ø rim : 82. Burial D.49 dug from Ie. *MHEM* 4, Pl. 1 : 17. |
| 7* | D | 101464 | A | Ie | 5YR 7/8 | ø rim : 68. Burial D.41 dug from Ie. |
| 8 | D | 102386 | A | Ie | 7.5YR 6/4 | ø rim : 98. Burial D.157 probably dug from Ie. |
| 9 | D | 101854 | A | Ig 2 | 7.5YR 6/4 | ø rim : 72. Burial D.87 dug from Ig 2. |
| 10* | D | 100644 | A | Ii [2] | 7.5YR 6/4 | ø rim : 102. *TD* 1, Pl. 17 : 6. |
| 11* | D | 100815 | A | Ii | 7.5YR 6/4 | ø rim : 65. |
| SUSIANA | | | | | | |
| 12 | S | GS-5950 | A | XV | *rougeâtre* | ø rim : 90. *MDP* 47, Pl. 20 : 16 and *MHEM* 4, Pl. 1 : 37. |

1) For a goblet of this group found in the Southern Alluvial Plain (Warka), see fig. 8.
2) See *TD* 2, 38 for the stratigraphical correction.

C.P.U. = Chronological Position Uncertain

Continued on Pl. 60




10 cm

(Photos at various scales)

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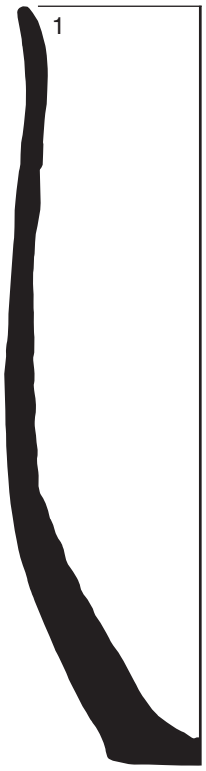
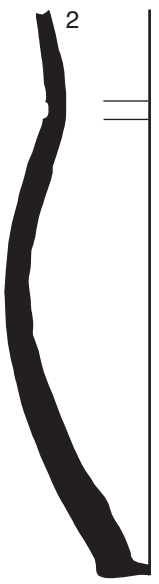
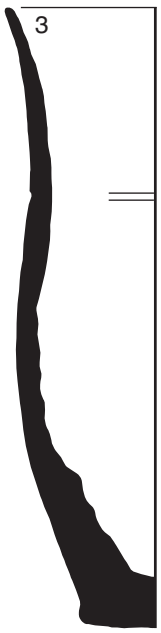
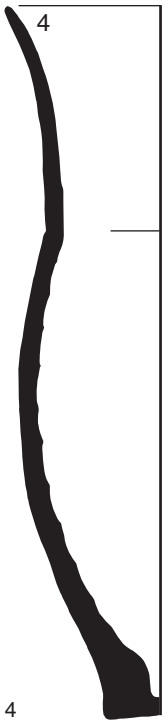
—1500

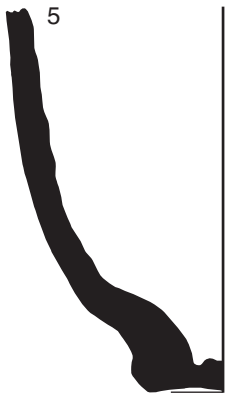
95 A 1

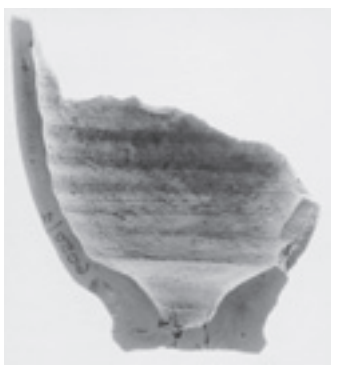


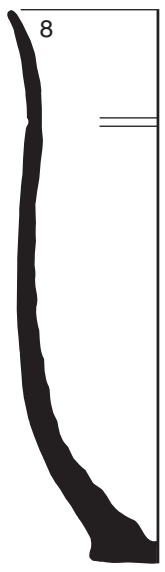


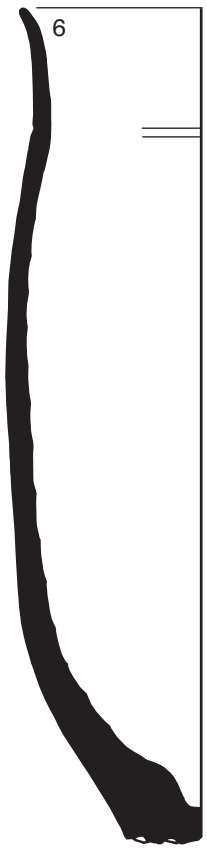


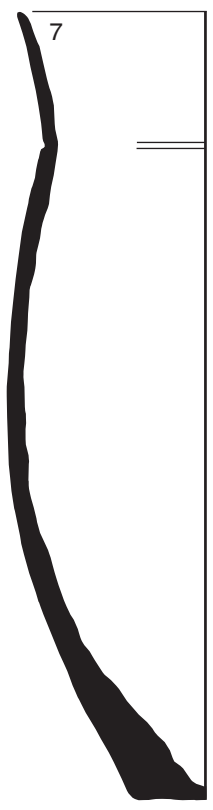




—1600



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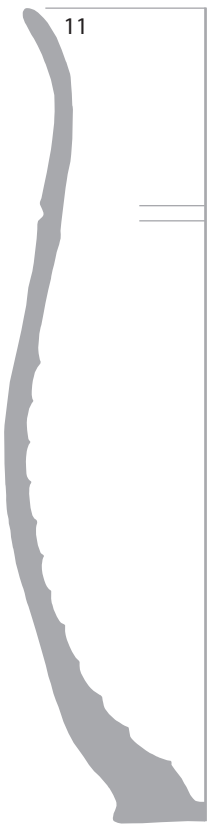
10



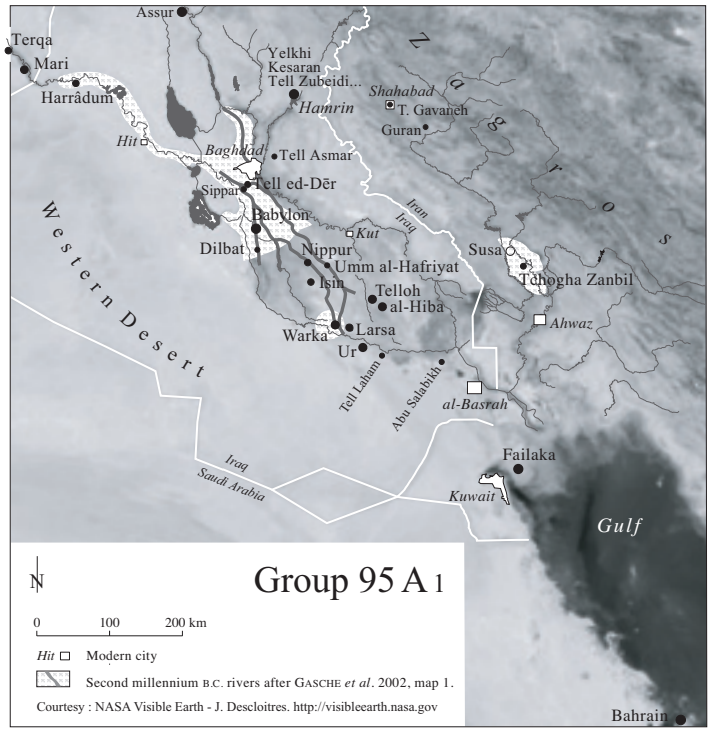
11

# PLATE 60

## 95 A 1

Continued from Pl. 59

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 103458 | E *sud* | Ib | 7.5YR 7/4 | ø rim : 95. Burial D.224 probably dug from Ib. |
| 2* | D | 106165 | E | IIId | 10YR 7/4 | ø rim : -. *MHEM* 1, Pl. 33 : 1. |
| 3* | D | 104496 | E | V | 7.5YR 7/4 | ø rim : 76. Burial D.277 probably dug from Ensemble V. |
| 4 | D | 100324 | A | 0 | 10YR 7/3 | ø rim : 80. *TD* 1, Pl. 10 : 2. Pit 1 (cf. *TD* 2, Plan 6) now attributed to Ensemble 0. |
| 5* | D | 106053 | E | IIId | 10YR 7/3 | ø rim : -. |
| 6* | D | 100384 | A | Ia | 5YR 6/6 | ø rim : 93. |
| 7 | D | 101315 | A | Ia | 7.5YR 6/4 | ø rim : 40. |
| 8 | D | 100412 | B | Ia | 10YR 7/4 | ø rim : 78. Found inside *TD* 1, Pl. 17 : 7 (now "Sondage B, Phase I a" instead of "Ic, I C"). |
| SUSIANA | | | | | | |
| 9 | S | GS-5504 | A | XIII | *brune* | ø rim : 76. *MDP* 47, Pl. 20 : 2 and *MHEM* 4, Pl. 1 : 35. |
| 10 | S | GS-5520 | A | XIII | 10YR 8/3 | ø rim : 75. PONS 1991, *Catal*. p. 98 = Louvre, Sb 19012 = *MDP* 47, Pls. 20 : 4 and 62 : 1. |
| 11 | S | GS-6137 | A | XIV | *brune* | ø rim : 96. *MDP* 47, Pl. 20 : 11, 62 : 4. *MHEM* 4, Pl. 1 : 36. |




10 cm

(Photos at various scales)

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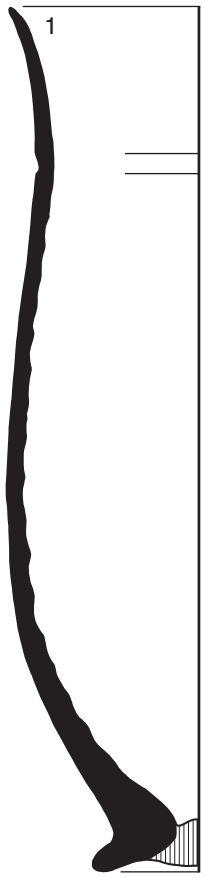
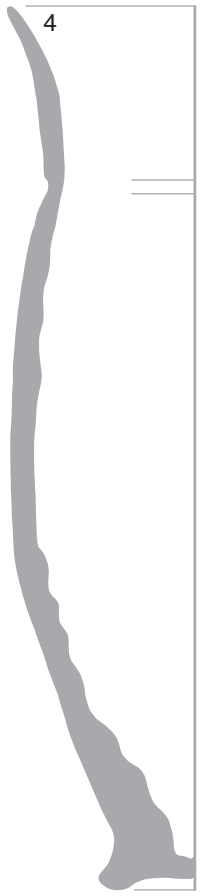
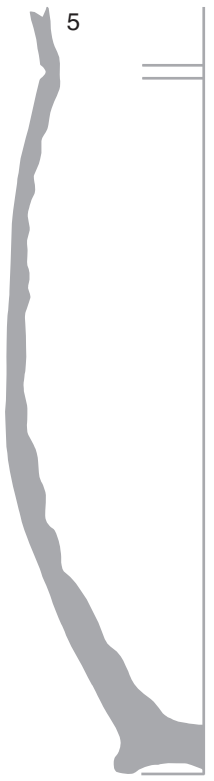
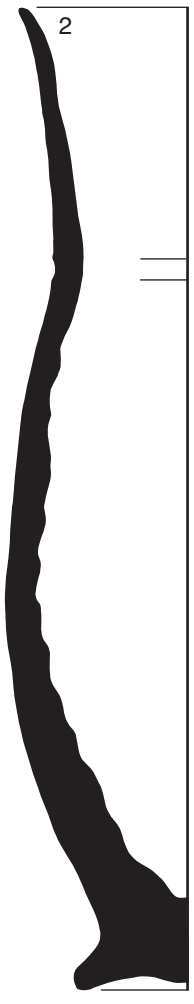
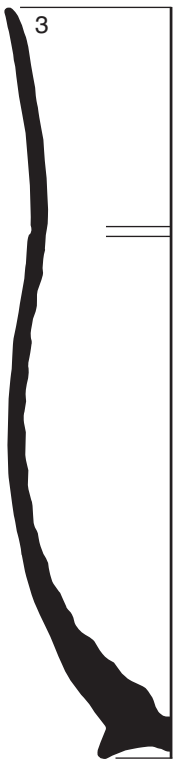


1



3

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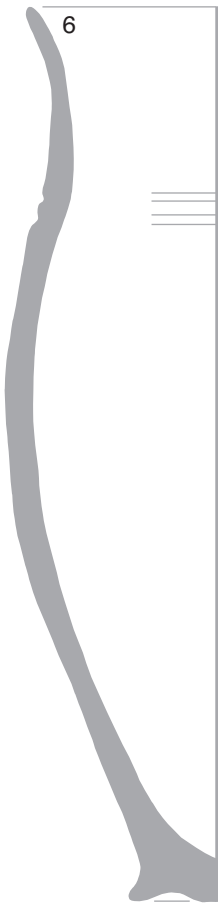


# PLATE 61

## 95 A 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 101373 | A | Ia | 5YR 5/6 | ø rim : 98. Plugged base. Burial D.33 dug from Ia. *TD* 2, Pl. 15 : 4. |
| 2* | D | 101393 | A | Ic | 10YR 7/3 | ø rim : 88. *MHEM* 4, Pl. 1 : 16. |
| 3* | D | 101219 | A | Ic | 7.5YR 6/4 | ø rim : 84. |
| MIDDLE EUPHRATES | | | | | | |
| 4 | Din | V 419 | *Bât*. 10 | 3C | *beige verdâtre* | ø rim : 98. *Haradum* 1, fig. 91 : 3. *MHEM* 4, Pl. 1 : 3. Marks on surface and repair of rim not shown. |
| 5* | Din | 311/1 | *Bât*. 13 | 3C | 7.5YR 7/4 | ø rim : -. *Haradum* 1, fig. 91 : 4. Redrawn. |
| DIYALA | | | | | | |
| 6 | Yel | HY 339/2 | B | IVa | *cuoio* | ø rim : 98. Burial 25. GABUTTI 2002-03, Pl. 77 : 1. |

Continued on Pl. 62

10 cm

(Photos at various scales)

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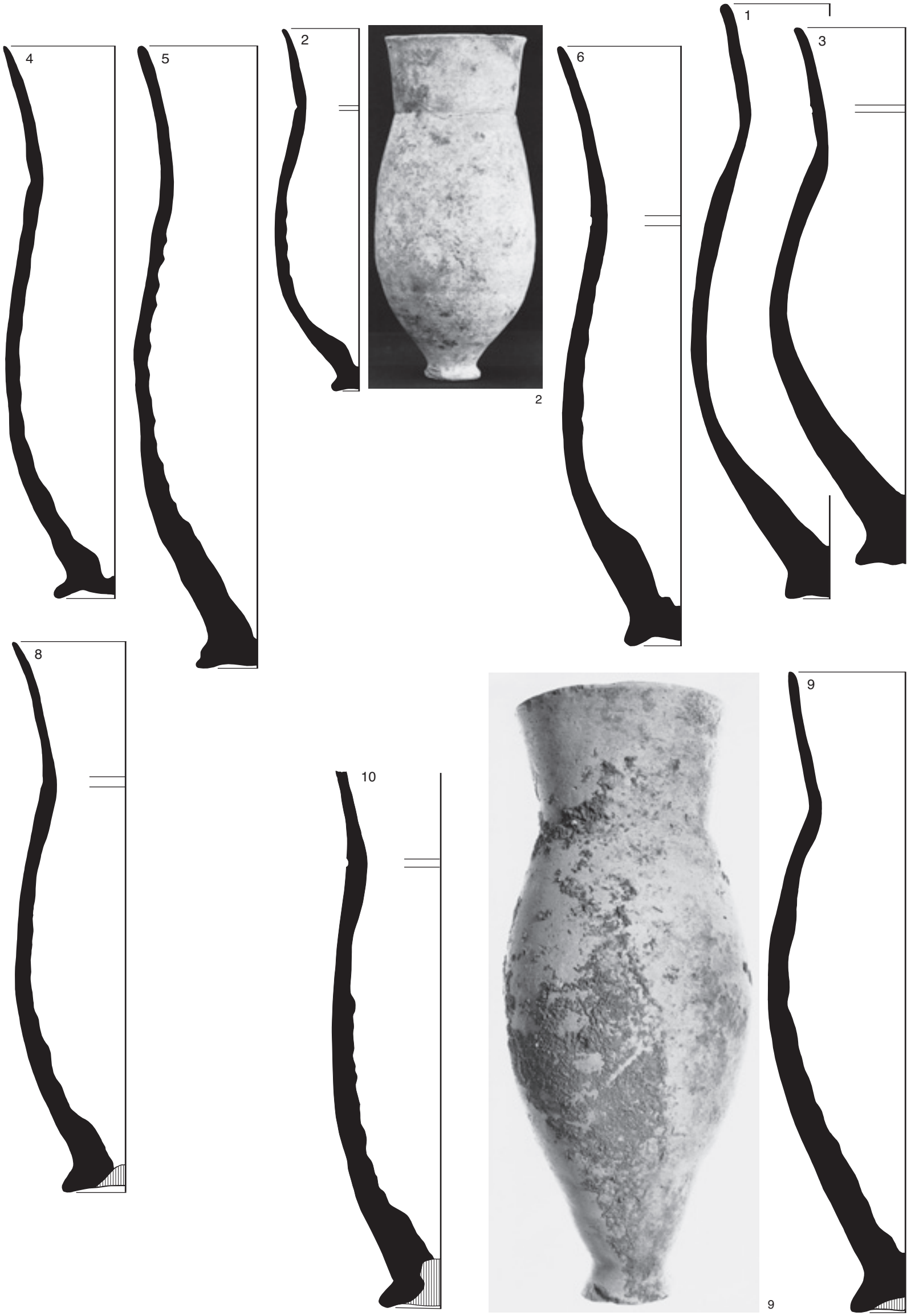
95 A 2



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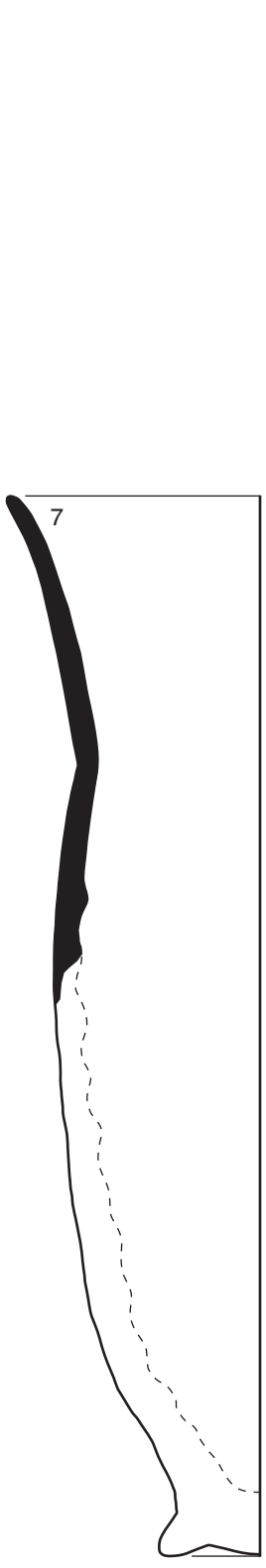
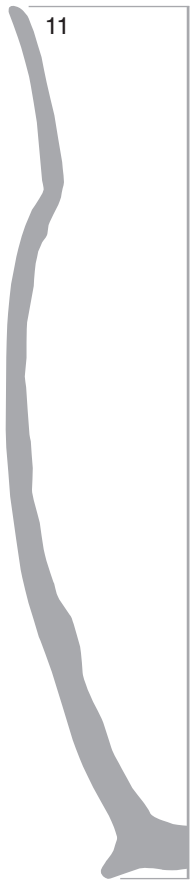
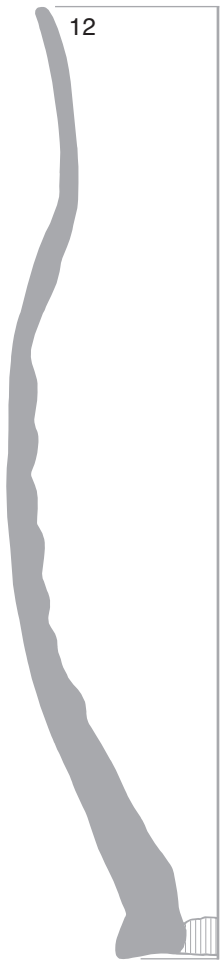


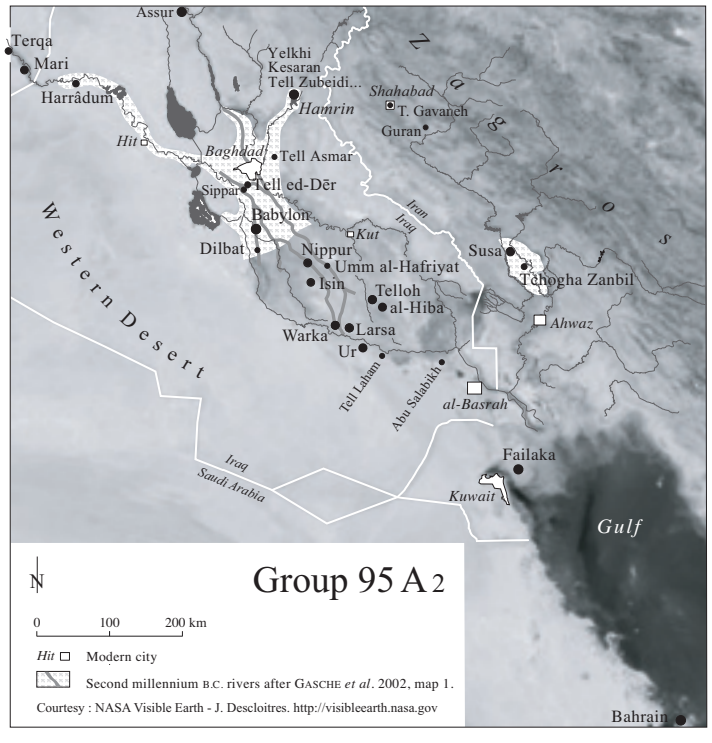



# PLATE 62

## 95 A 2

Continued from Pl. 61

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 103935 | E | IIIb | 5Y 8/2 | ø rim : 100. Burial D.245 dug from IIIb. *MHEM* 1, Pls. 24 and 33 : 8. |
| 2 | Dey | 1 D 25 | B | III | 2.5Y 7/4 S : 5Y 8/3.5 | ø rim : 69. Burial 10 dug from III. ARMSTRONG 2001, figs. 5 and 9 : a. *MHEM* 4, Pl. 1 : 12. |
| 3* | D | 103950 | E | IIIb | 10YR 7/2 | ø rim : 100. Burial D.243 probably dug from IIIb. *MHEM* 1, Pls. 24 and 33 : 17. |
| 4* | D | 105824 | E | IIId | 7.5YR 8/4 | ø rim : 102. Burial D.328 dug from IIId. *MHEM* 1, Pls. 16 and 33 : 21. |
| 5 | Dey | 1 D 26 | B | IV | 7.5YR 7/4 S : 5Y 8/4 | ø rim : 101. Burial 12 dug from IV. ARMSTRONG 2001, figs. 4 and 9 : b. *MHEM* 4, Pl. 1 : 13. |
| 6* | D | 104403 | E | IIId | 5YR 6/6 | ø rim : 114. Burial D.274 probably dug from IIId. *MHEM* 1, Pls. 17 and 33 : 19. |
| 7 | B | VA Bab 4250g | Saḫn 30ax *Älteres Gebäude unter der Prozessionsstr.* | -1,00m | - | ø rim : 136. Courtesy *Staatliche Museen zu Berlin, Vorderasiatisches Museum.* Drawn by Katja Sternitzke (Ludwig-Maximilians-Universität München). |
| 8* | D | 107968 | F | Ia | 10YR 7/3 | ø rim : 104. Plugged base. *NAPR* 3, Pl. 6 : 7 and *MHEM* 4, Pl. 1 : 10. |
| 9* | D | 107888 | F | Ib | 2.5Y 8/4 | ø rim : 108. Patched base. |
| 10* | D | 107966 | F | Ia | 2.5Y 8/2 | ø rim : -. Filled-in base. . *NAPR* 3, Pl. 6 : 9 and *MHEM* 4, Pl. 1 : 9. |
| MIDDLE EUPHRATES | | | | | | |
| 11 | Din | V 141 | *Bât.* 3 | 3A | *beige rosé* | ø rim : 95. *Haradum* 1, fig. 94 : 1. *MHEM* 4, Pl. 1 : 1. |
| 12* | Din | V 269 | *Bât.* 8 | $3B_2$ | 5YR 7/3 | ø rim : 96. Plugged base. *Haradum* 1, fig. 92 : 5. *MHEM* 4, Pl. 1 : 2. Redrawn. |




10 cm

(Photos at various scales)

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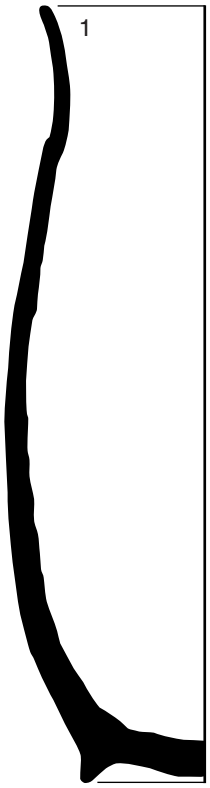
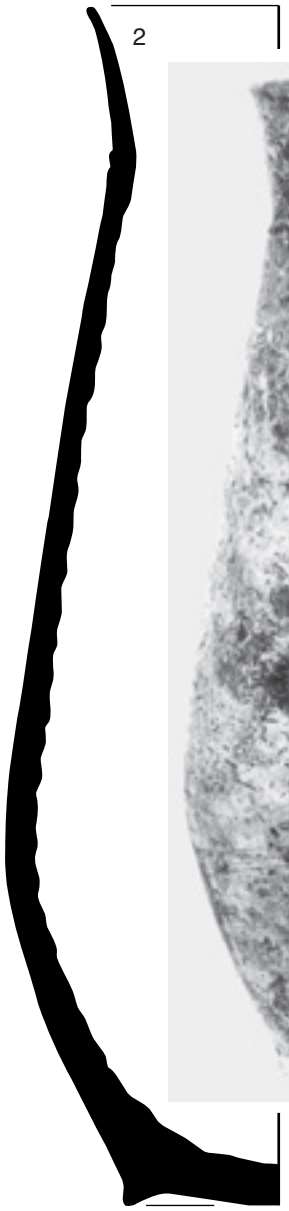
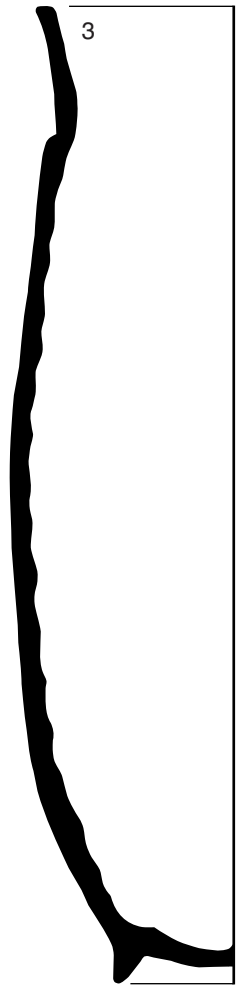
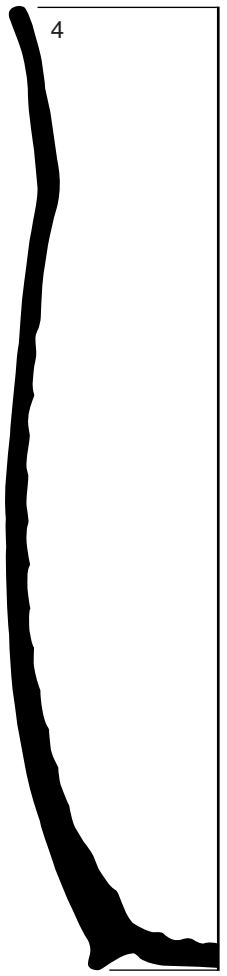
—1700

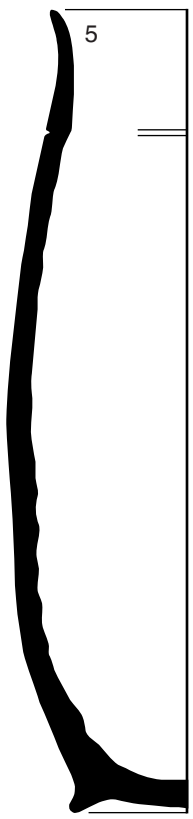


2



5

—1800

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# PLATE 63

## 100 A 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | D | 102700 | A | Ig | 5YR 8/2 | ø rim : 88. Burial D.182 dug from Ig. |
| 2 | D | 102699 | A | Ig | 5YR 6/6 | ø rim : 104. Burial D.182 dug from Ig. |
| 3* | D | 102791 | A | Ig 2 | 10YR 7/3 | ø rim : 104. Burial D.192 dug from Ig 2. |
| 4* | D | 100552 | A | Ii | 7.5YR 6/4 | ø rim : 110. Burial D.3 dug from Ii. *TD* 1, Pl. 18 : 2. |
| 5 | D | 102307 | A | Ii 1-2 | 5Y 7/3 | ø rim : 72. Burial D.146 dug from Ii 1 or 2. |

Continued on Pl. 64

10 cm

(Photos at various scales)

➤ ➤

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100 A 2

—1500

—1600

1

2

3

4

5

6

NORTHERN ALLUVIAL PLAIN

—1700

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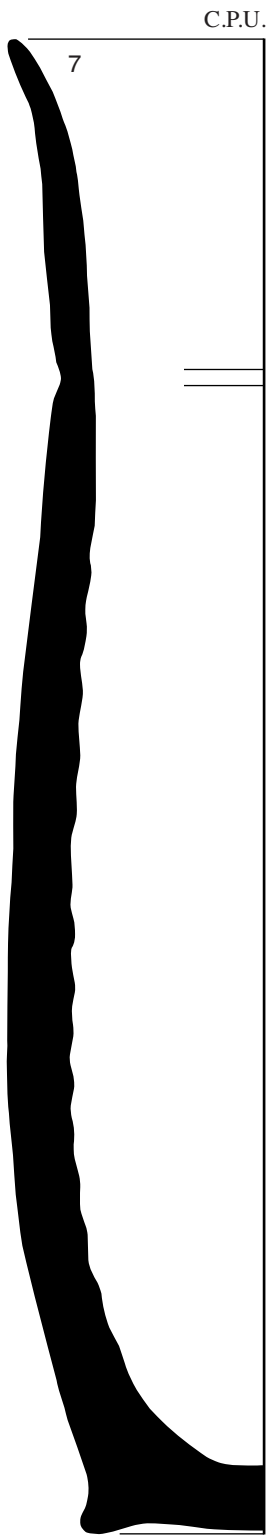



SOUTHERN ALLUVIAL PLAIN

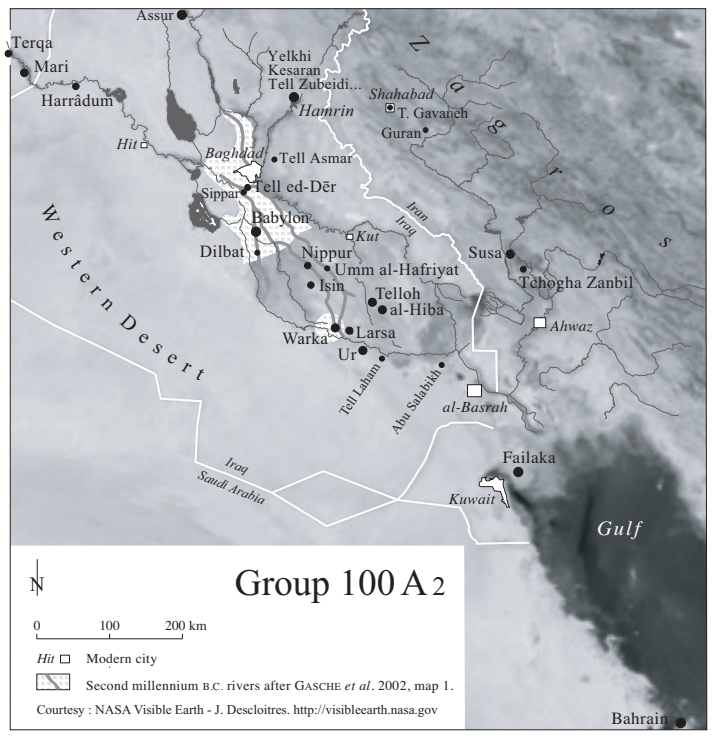
# PLATE 64



Continued from Pl. 63

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 105712 | E | IIId-f | 7.5YR 7/4 | ø rim : 154. *MHEM* 1, Pl. 32 : 8 (read IIId-f instead of IIId). |
| 2 | D | 101639 | B | I | 10YR 7/3 | ø rim : 140. Burial D.53 dug from Ensemble I. |
| 3 | D | 102922 | A | Ia | 7.5YR 6/4 | ø rim : 133. Burial D.197 dug from Ia. SALLABERGER 1996, Pl. 2 : 4. |
| 4 | D | 101394 | A | Ic | 5Y 6/6 | ø rim : 140. |
| 5 | D | 101944 | A | Ic | 2.5Y 7/6 | ø rim : 96. Burial D.118 dug from Ic. |
| 6* | D | 101544 | A | Ie | 5YR 6/4 | ø rim : 102. Burial 42 dug from Ie. Complete vessel. Shape variation of neck/rim. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 7 | W | 20126 | Sînkāšid | 5a | *hellgelb* | ø rim : 136. VAN ESS 1988a, fig. 35 : 205. |

C.P.U. = Chronological Position Uncertain




10 cm

(Photos at various scales)

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100 B 2

—1700

1

2

4

4

5

5

NORTHERN ALLUVIAL PLAIN

—1800

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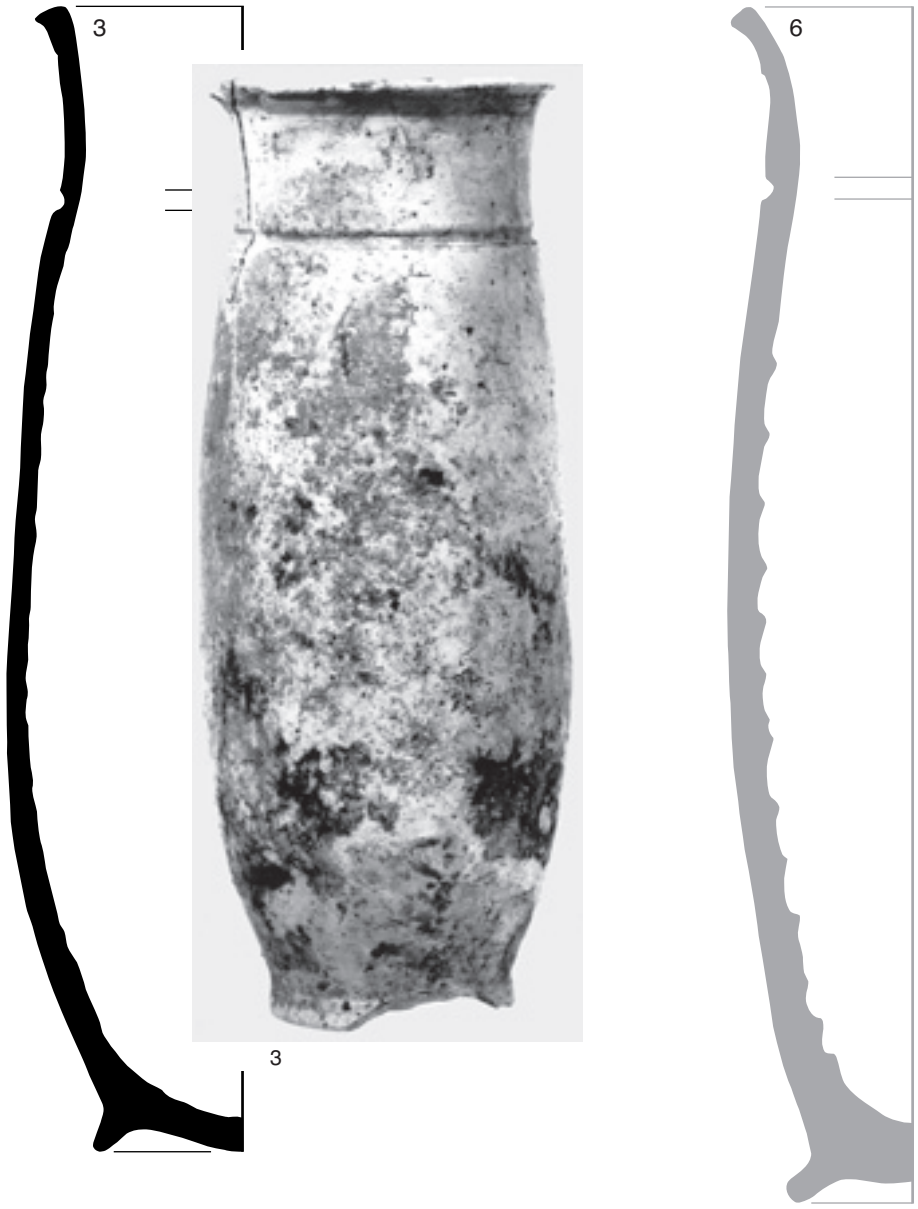


## 100 B 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | D | 101942 | A | Ig | 5Y 7/2 | ø rim : 112. Burial D.115 dug from Ig. |
| 2 | D | 101900 | A | Ig | 2.5Y 8/4 | ø rim : 108. Burial D.92 dug from Ig. |
| 3 | D | 102502 | A | Ig | 5YR 6/6 | ø rim : 110. Burial D.164 dug from Ig. |
| 4 | D | 102306 | A | Ii | 5Y 8/3 | ø rim : 138. Burial D.146 dug from Ii. SALLABERGER 1996, Pl. 2 : 6. |
| 5 | D | 102766 | A | Ii | 10YR 7/3 | ø rim : 96. Burial D.191 dug from Ii. |
| DIYALA | | | | | | |
| 6 | As | As. 30 : P. 47 | P 30 : 1 | - | - | ø rim : 98. *OIP* 63, Pl. 171 : C.228.340a (Ibalpiel I well, Late Larsa). |

Continued on Pl. 66

10 cm

(Photos at various scales)

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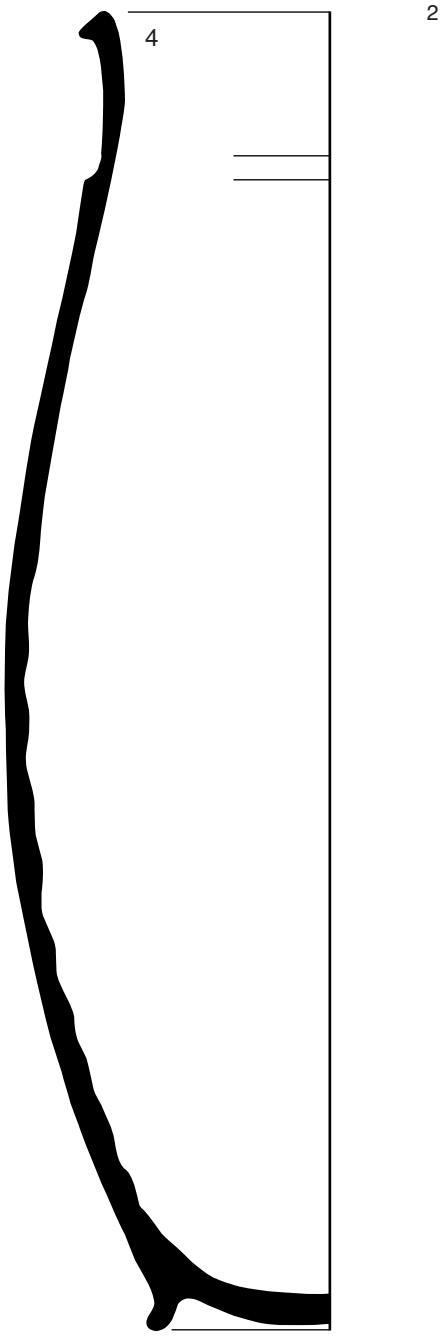
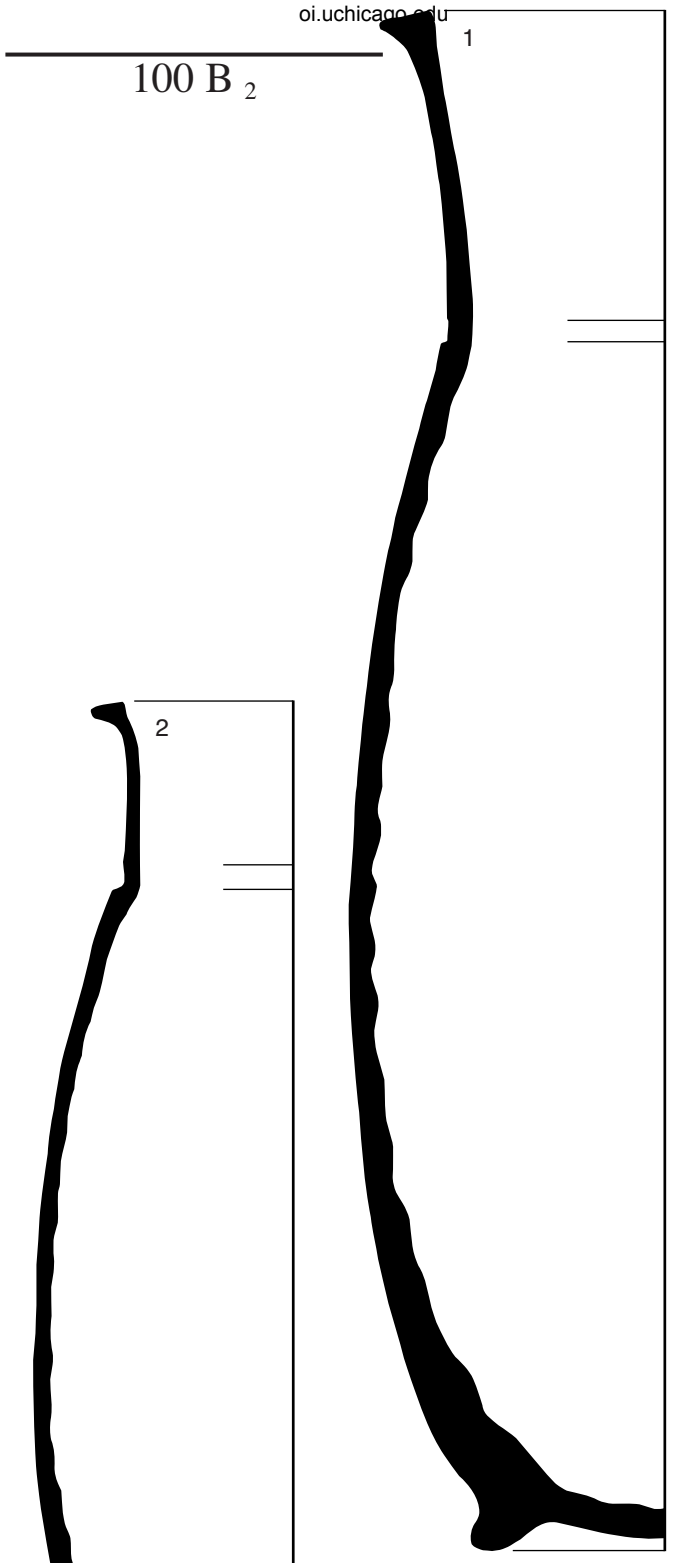
100 B 2




1

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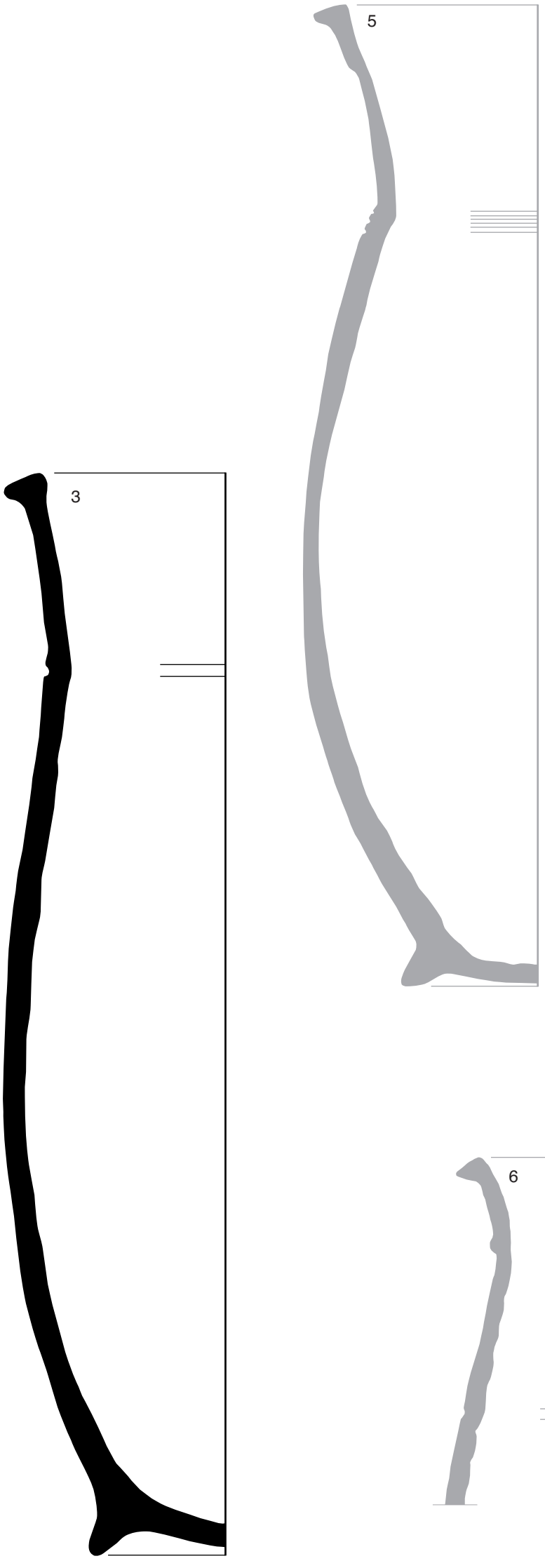
# PLATE 66

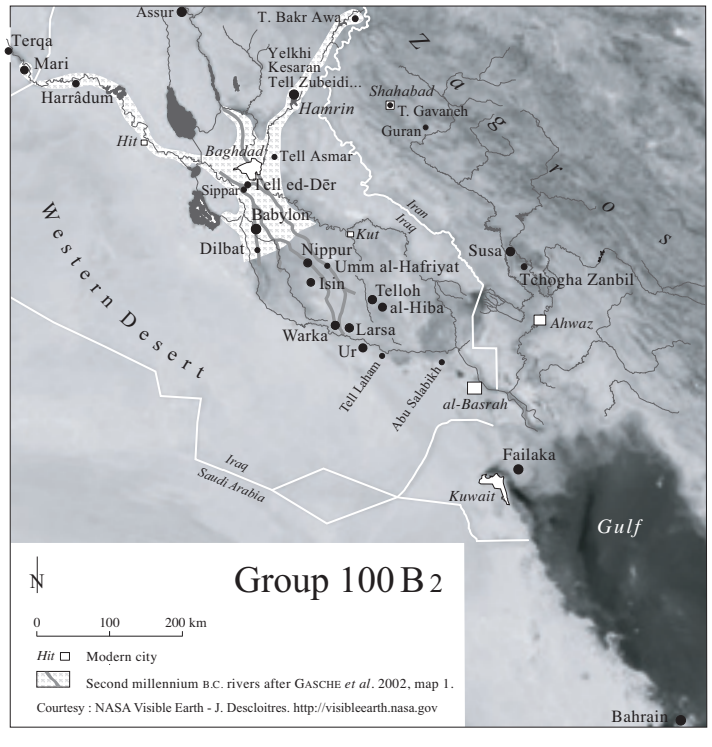
100 B 2

Continued from Pl. 65

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | D | 101369 | A | Ia | 5Y 8/4 | ø rim : 152. Burial D.33 dug from Ia. *TD* 2, Pl. 15 : 2. |
| 2 | D | 101943 | A | Ic | 5YR 6/6 | ø rim : 107. Burial D.118 dug from Ic. |
| 3 | D | 101721 | A | Ie | 2.5YR 4/4 | ø rim : 168. |
| 4 | D | 102904 | A | Ie | 10YR 7/3 | ø rim : 130. Burial D.205 dug from Ie. |
| MIDDLE EUPHRATES | | | | | | |
| 5 | Din | V 534 | *Bât.* 33 | 3C | *beige à beige rosé* | ø rim : 180. *Haradum* 1, fig. 83 : 1. |
| 6 | M | III G1 SE5 | F | - | 2.5Y 8/4 | ø rim : 133. From a pit assoc. with "Lim" Layers. PONS 1999b, fig. 18 : 1. PONS 1999a, 194, Pl. 67 : 2 c (No. 252200). |

Continued on Pl. 67




10 cm

(Photos at various scales)

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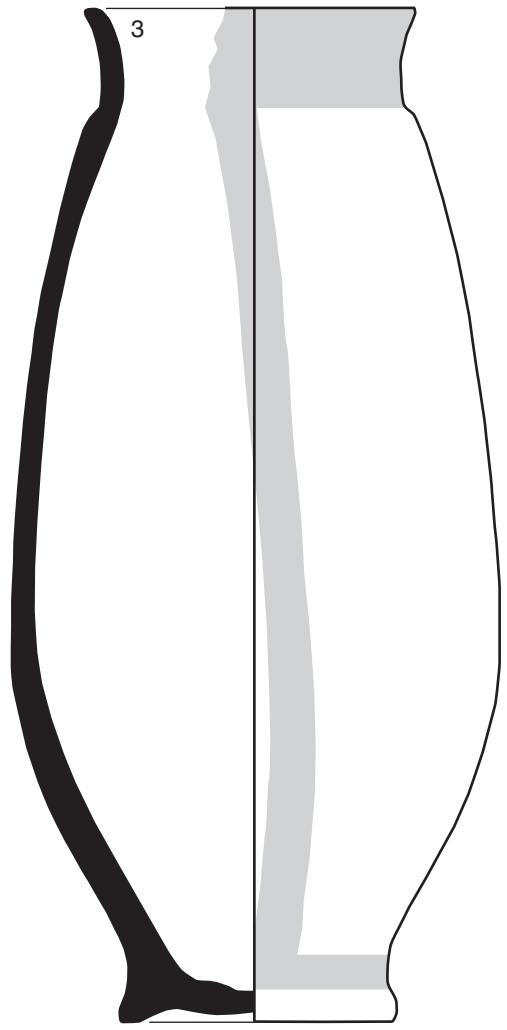
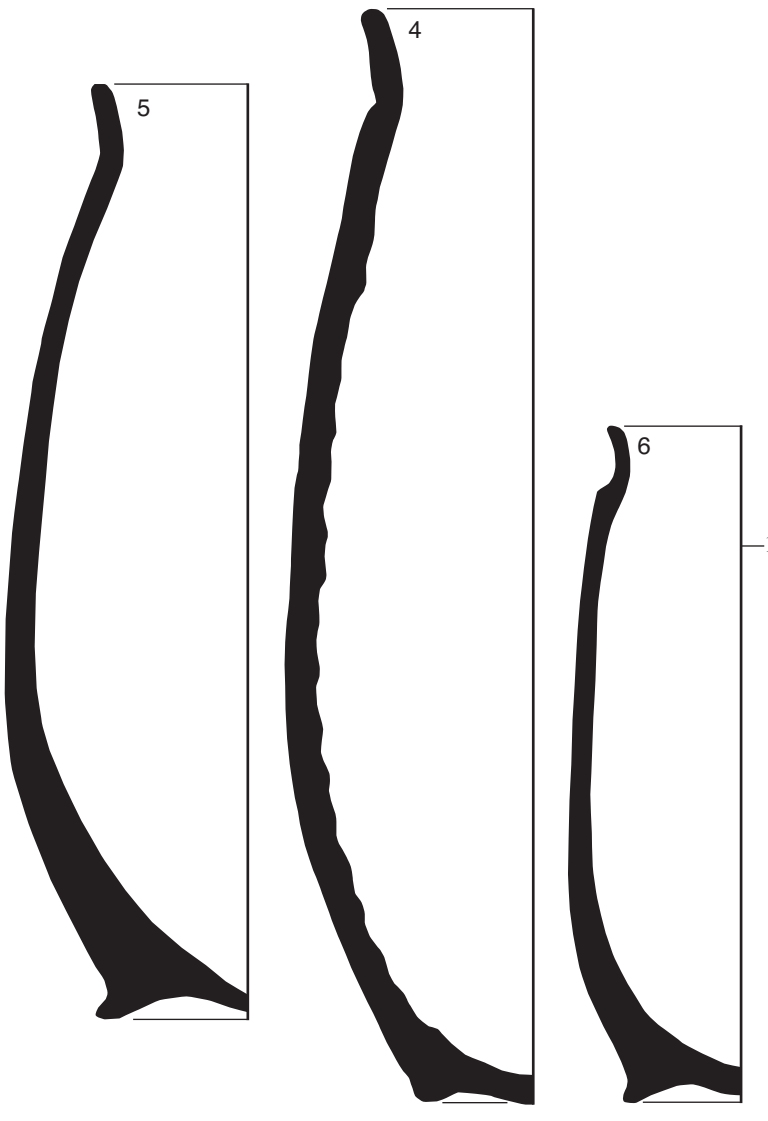
100 B 2

105 A 2




1600

1700

1700

1800

DIYALA

SOUTHERN ALLUVIAL PLAIN

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1600—

105 A 2

8

1700—

SOUTHERN ALLUVIAL PLAIN

# PLATE 67

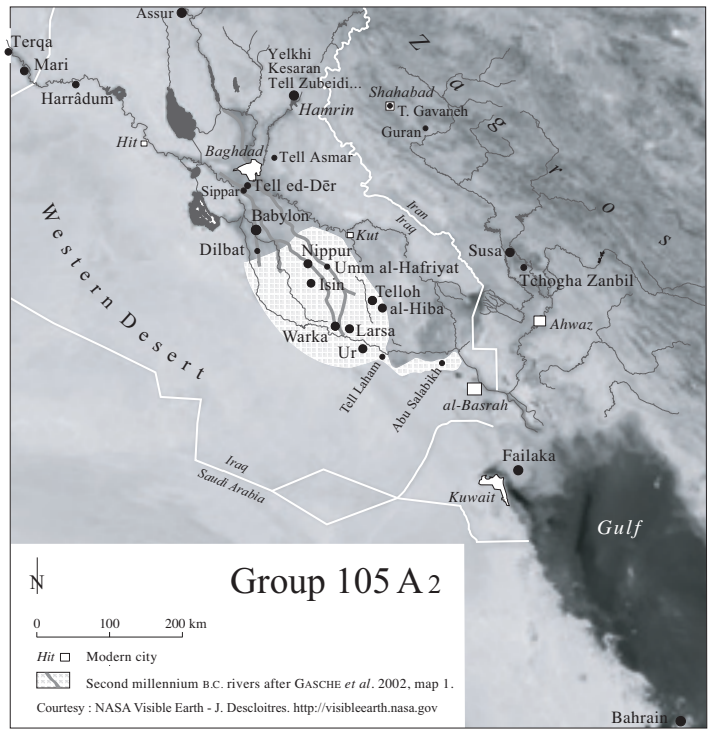
## 100 B 2

Continued from Pl. 66

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| DIYALA | | | | | | |
| 1 | Yel | HY 98 | A | IIIa | *rossastro* | ø rim : 129. GABUTTI 2002-03, Pl. 108 : 2. |
| 2 | Yel | HY 275 | B | IVa | *giallo-verdastro* | ø rim : 142. GABUTTI 2002-03, Pl. 107 : 1. |

## 105 A 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 3 | W | 14576n | P XIII | - | *hellgrau* | ø rim : 87. Burial 20. *AUWE* 10, Pl. 14 : n = VAN ESS 1988b, fig. 8 : 44. Geometric design on exterior in dark paint. |
| 4 | N | 2P 424 | TB | III 1 | light brown S : buff | ø rim : 114. (complete shape provided by OI, Chicago). *OIP* 78, Pl. 95 : 14. |
| 5 | W | 15255b | Pb 13-1 | - | *hellgrau* | ø rim : 87. Burial 45. *AUWE* 10, Pl. 24 : b = VAN ESS 1988b, fig. 6 : 29. |
| 6 | W | 14925b | Pb 13-3 | - | *hellgrau* | ø rim : 70. Burial 36. *AUWE* 10, Pl. 19 : b = VAN ESS 1988b, fig. 8 : 45. |
| 7 | N | 11 N 189 | WB | IV 1 | buff | ø rim : 102. *OIC* 22, fig. 86 : 2. |
| 8 | N | 12 N 453 | WB | IV 2 | buff S : cream | ø rim : 83. Painted band on interior and exterior of rim. FRANKE 1978, fig. 60 : 5. |




10 cm

(Photos at various scales)

105 B 2

1

2

2

3

—1700

7

8

C.P.U.

9

—1800

10

9

—1900

NORTHERN ALLUVIAL PLAIN

SOUTHERN ALLUVIAL PLAIN

—2000

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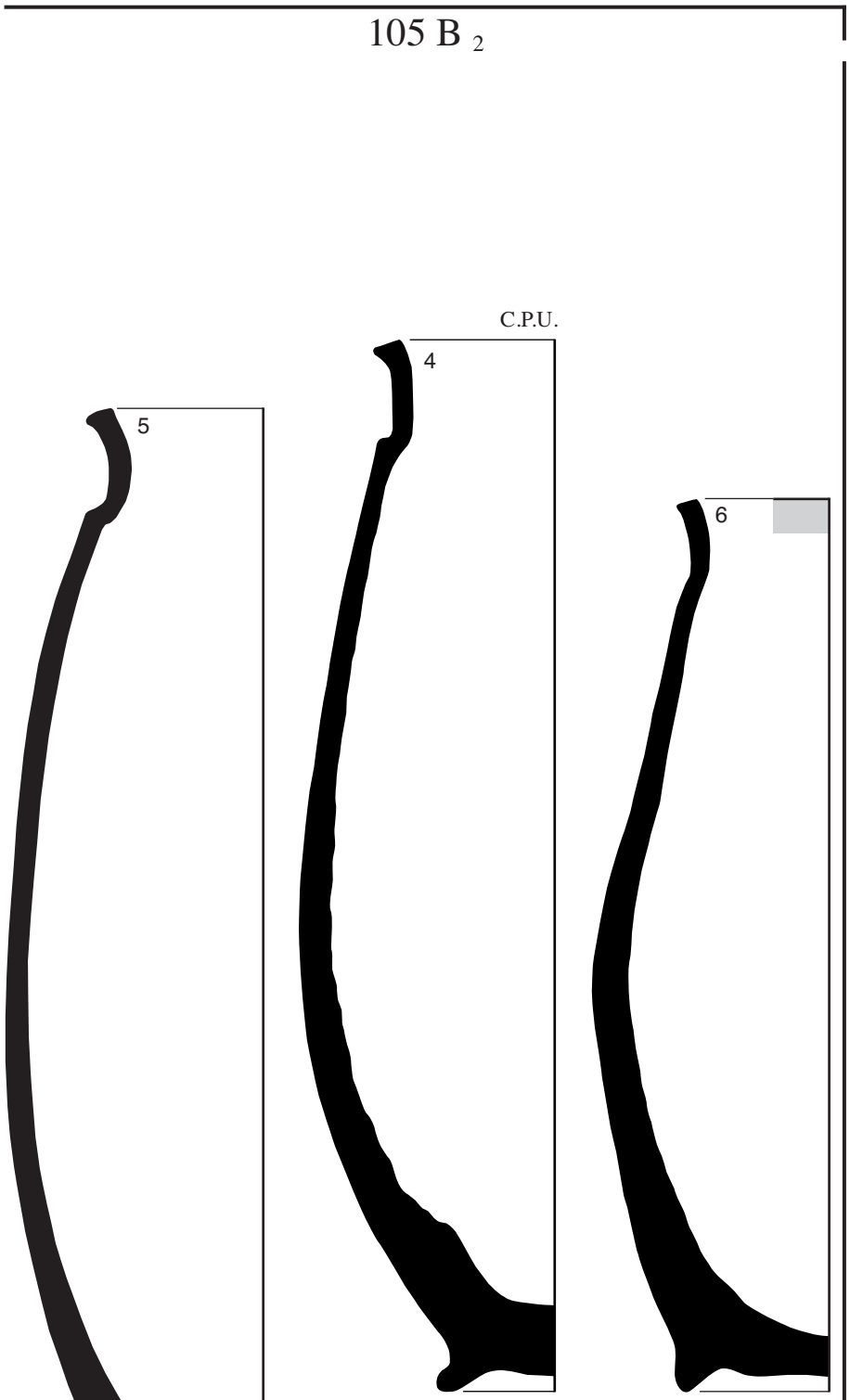
# PLATE 68

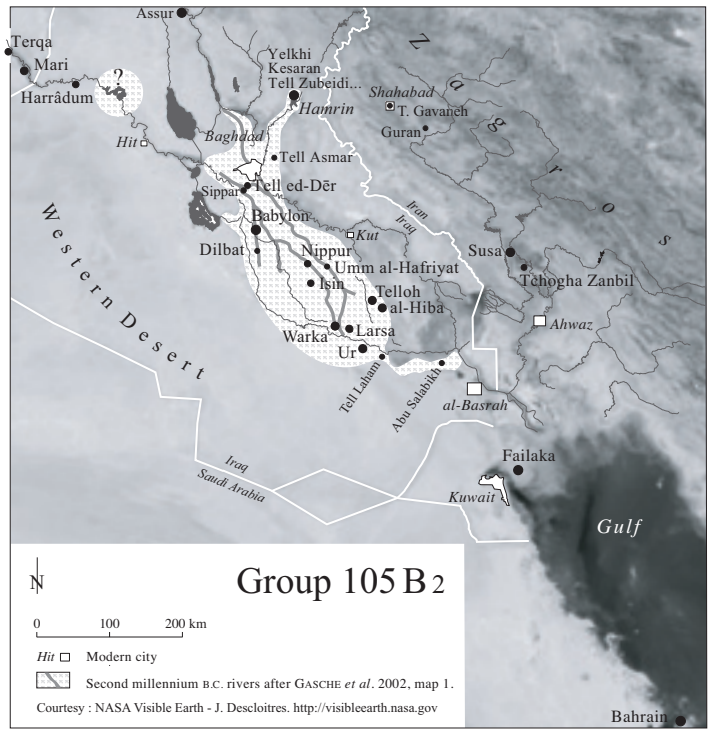
## 105 B 2



4

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | D | 101913 | A | Ie | 5YR 5/4 | ø rim : 112. Burial 112 dug from Ie. |
| 2 | D | 101906 | A | Ii | 10YR 8/3 | ø rim : 100. Burial D.91 dug from Ii. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 3 | H | 1H 72 | B | - | - | ø rim : 140. |
| 4 | L | L. 423 | - | - | 10YR 8/2 | ø rim : 102. Exc. Parrot, 1933. |
| 5 | W | 15043a | Pb 12-4 | - | *braungrau*<br>S : *hellgrau* | ø rim : 100. Burial 37. *AUWE* 10, Pl. 20 : a = VAN ESS 1988b, fig. 7 : 30. |
| 6 | N | 3P 533 | TA | XII 1 | tan | ø rim : 84. *OIP* 78, Pl. 95 : 16. Dark-painted band on exterior of rim. |
| 7 | W | 15043d | Pb 12-4 | - | *braungrau*<br>S : *hellgrau* | ø rim : 67. Burial 37. *AUWE* 10, Pl. 20 : d = VAN ESS 1988b, fig. 7 : 33. |
| 8 | N | 2P 635 | TB | III | reddish | ø rim : 104. Burial 1B 287 dug from III. *OIP* 78, Pl. 84 : 10. |
| 9 | T | TG. 3826 | *Chantier V bis* | - - | - | ø rim : 75. Burial IV (*bijoutier*). Exc. de Genouillac, 1930. Louvre, AO 12494. Drawn at the Louvre. DE GENOUILLAC 1936, p. 31. Photo Louvre. |
| 10 | N | 3P 9 | TB | IV 1 | tan<br>S : buff | ø rim : 103. *OIP* 78, Pl. 84 : 9. |

C.P.U. = Chronological Position Uncertain




10 cm

(Photos at various scales)

SOUTHERN ALLUVIAL PLAIN

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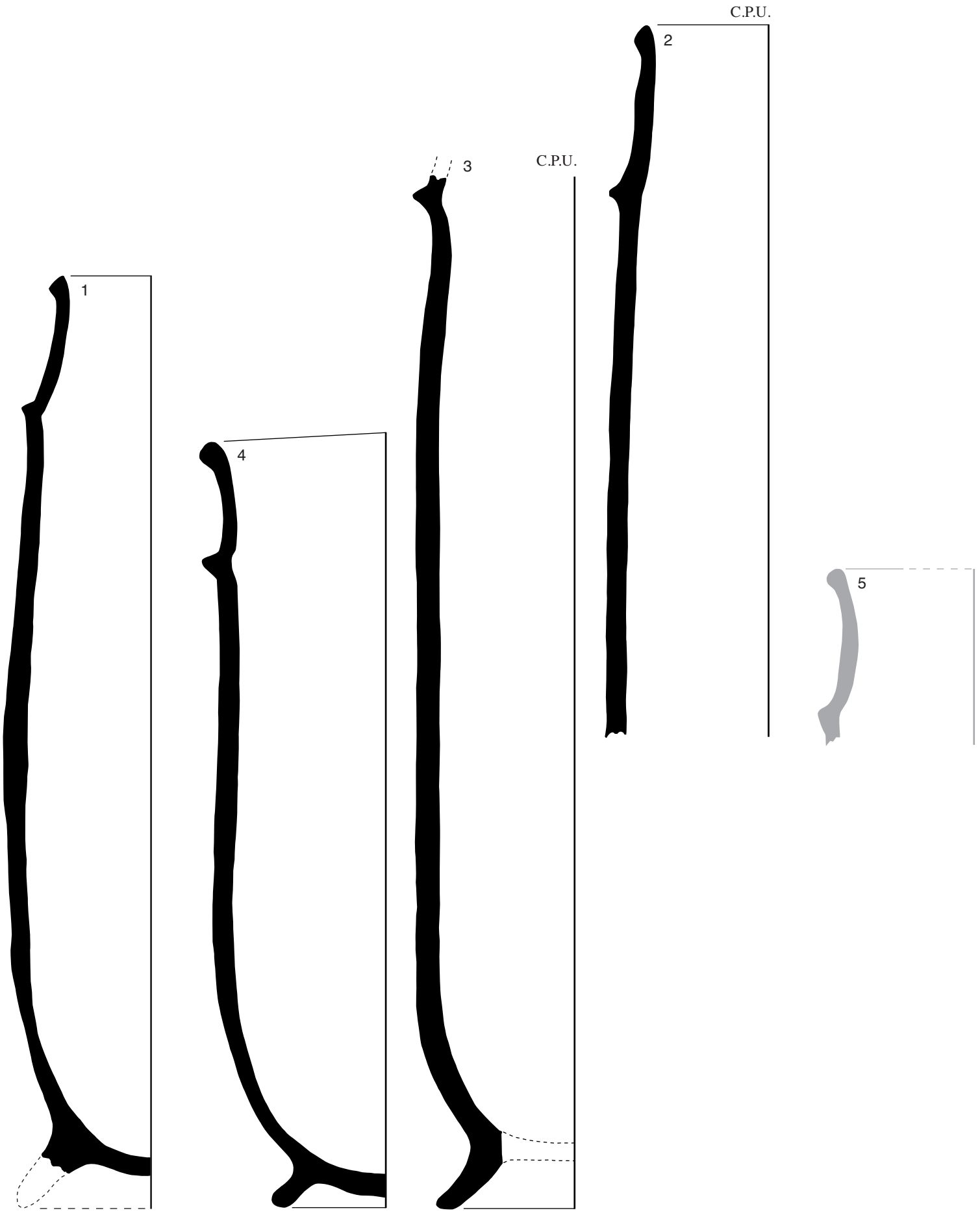
—1900

110 A 2




—2000

N. A. P. SOUTHERN ALLUVIAL PLAIN DIYALA

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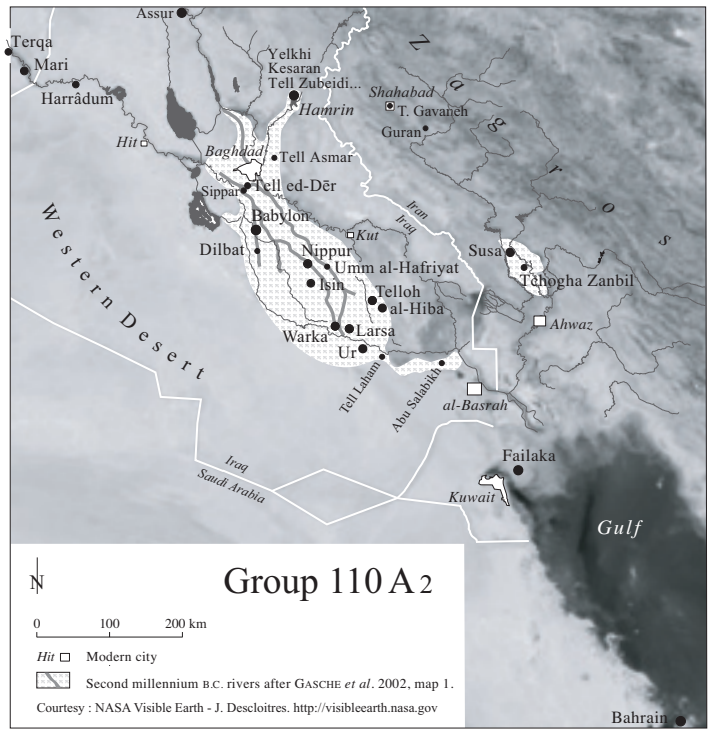
# PLATE 69

## 110 A 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | D | 104134 | A | IIId | 5YR 6/6 | ø rim : 80. Burial D.269 dug from IIId. *TD* 4, Pl. 11 : 1. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 2 | W | 19971b | Sînkāšid | 2 | *braunrot* | ø rim : 109. VAN ESS 1988a, fig. 40 : 232. Strommenger (*UVB* 18, 36, *sub* W 19971a) demonstrates that this vessel and No. 3 below are older than the Sînkāšid Palace. |
| 3 | W | 19971e | Sînkāšid | 2 | *gelb* | ø rim : -. VAN ESS 1988a, fig. 40 : 234. See No. 2 above. |
| 4 | N | 17 N 69 | WC-3 | VB | pinkish-buff | ø rim : 149. Burial 104 dug from VB. |
| DIYALA | | | | | | |
| 5 | Yel | 001 | B | VII | *cuoio scuro* | ø rim : ± 120. BERGAMINI 2002-03, Pl. 16 : 38. |

C.P.U. = Chronological Position Uncertain




10 cm

(Photos at various scales)

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110 B 1

110 B 2

—1800

—1900

C.P.U.

C.P.U.

—2000

S. A. P.

SOUTHERN ALLUVIAL PLAIN

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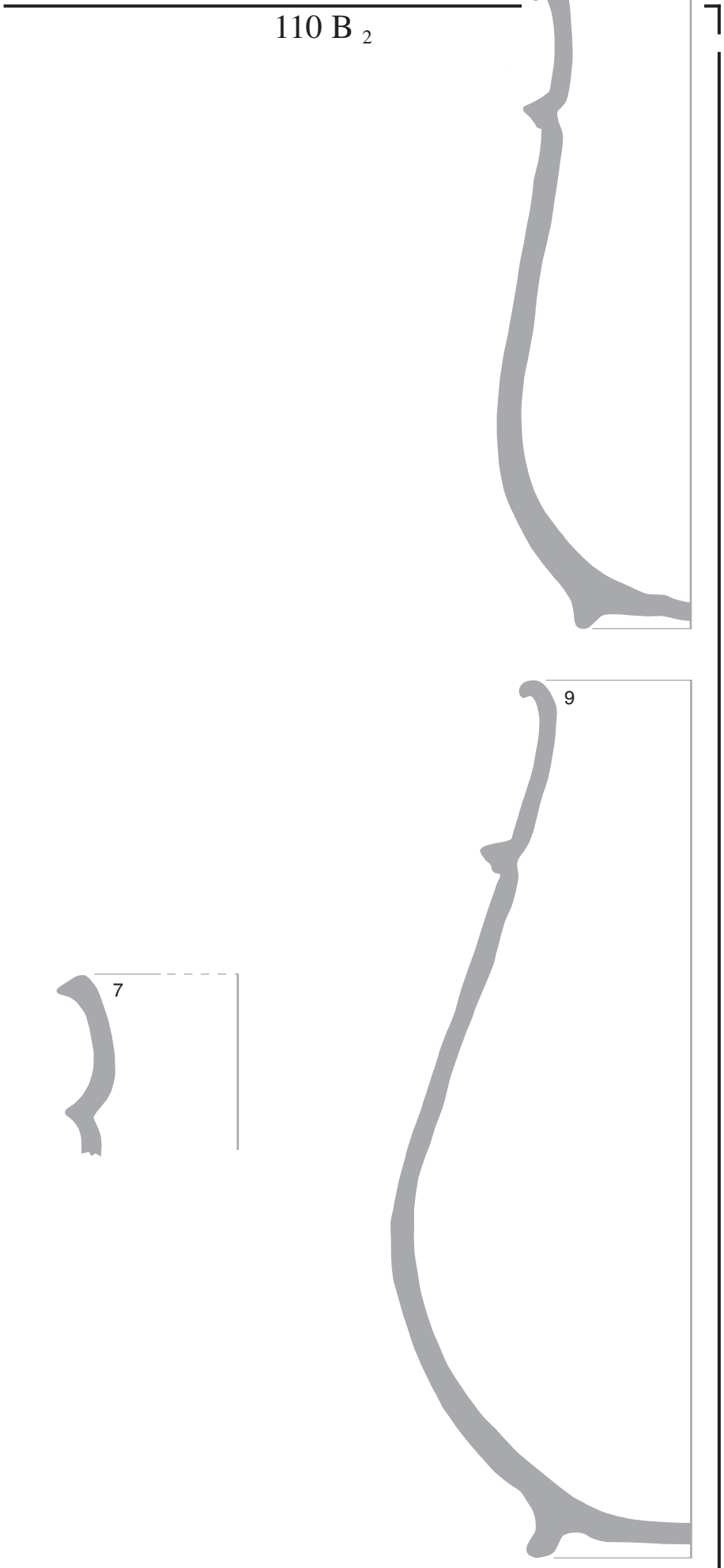
# PLATE 70

## 110 B 2




DIYALA SUSIANA

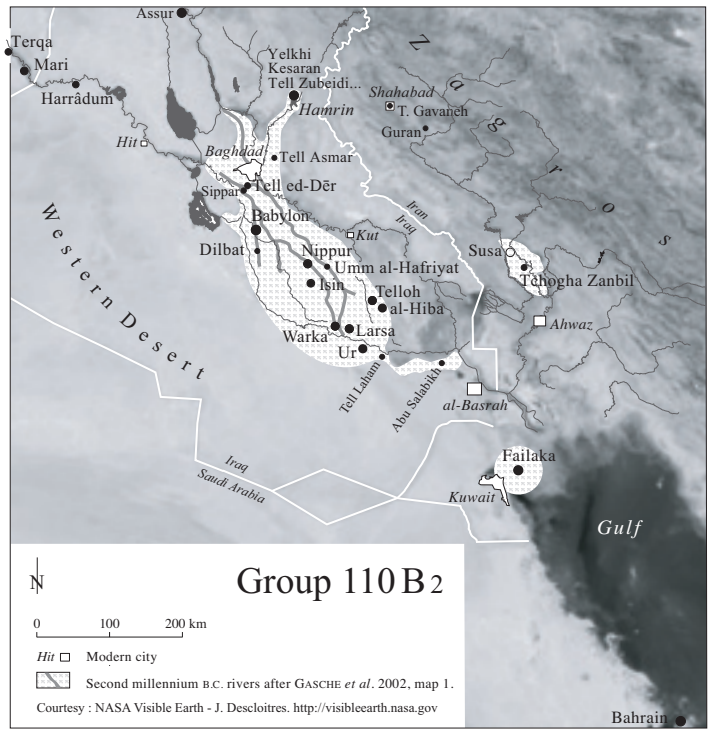
## 110 B 1

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | N | 2N 31 | TB | IV 1 | buff | ø rim : 48. *OIP* 78, Pl. 92 : 4. |

## 110 B 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 2 | W | 19789a | Sînkāšid | 1 | - | ø rim : 122. Burial 34, under Room 5 of the palace. *AUWE* 10, Pl. 17 : Grab 34a = VAN ESS 1988a, fig. 26 : 159. |
| 3 | N | 3P 346 | TB | VIII | tan | ø rim : 115. Unnumbered burial. *OIP* 78, Pl. 85 : 2. |
| 4 | T | TG. 2656 | - | - | - | ø rim : 100. From a burial, cf. DE GENOUILLAC 1936, p. 99 (vessel not illustrated). Exc. de Genouillac 1930. Louvre, AO 12491. Drawn at the Louvre. |
| 5 | T | - | - | - | *jaunâtre* | ø rim : 30. Exc. de Sarzec 1881. Louvre, AO 971. Drawn at the Louvre. Photo Louvre. |
| 6 | N | 3P 347 | TB | VIII | buff | ø rim : 117. Unnumbered burial. *OIP* 78, Pl. 85 : 3. |
| DIYALA | | | | | | |
| 7 | Yel | 002 | B | VII | *cuoio scuro* | ø rim : ± 120. BERGAMINI 2002-03, Pl. 16 : 37. Reoriented. |
| SUSIANA | | | | | | |
| 8 | S | GS-6756 | B | VI | *jaunâtre* | ø rim : 108. Burial S.175 dug from B VI. *MDP* 47, Pls. 18 : 7 and 61 : 7. |
| 9 | S | GS-6745 | B | VII | *jaunâtre* | ø rim : 117. *MDP* 47, Pls. 18 : 10 and 61 : 8. |

C.P.U. = Chronological Position Uncertain




10 cm

(Photos at various scales)

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1500

| 115 A 2 | 115 A 3 | 115 B 2 | 115 C 3 |
|---|---|---|---|

C.P.U.

1

2

C.P.U.

3

4

1700

5

1700

5

1

C.P.U.

4

1600

1800

1800

| N. A. P. | DIYALA | N. A. P. | S. A. P. | N. A. P. |
|---|---|---|---|---|

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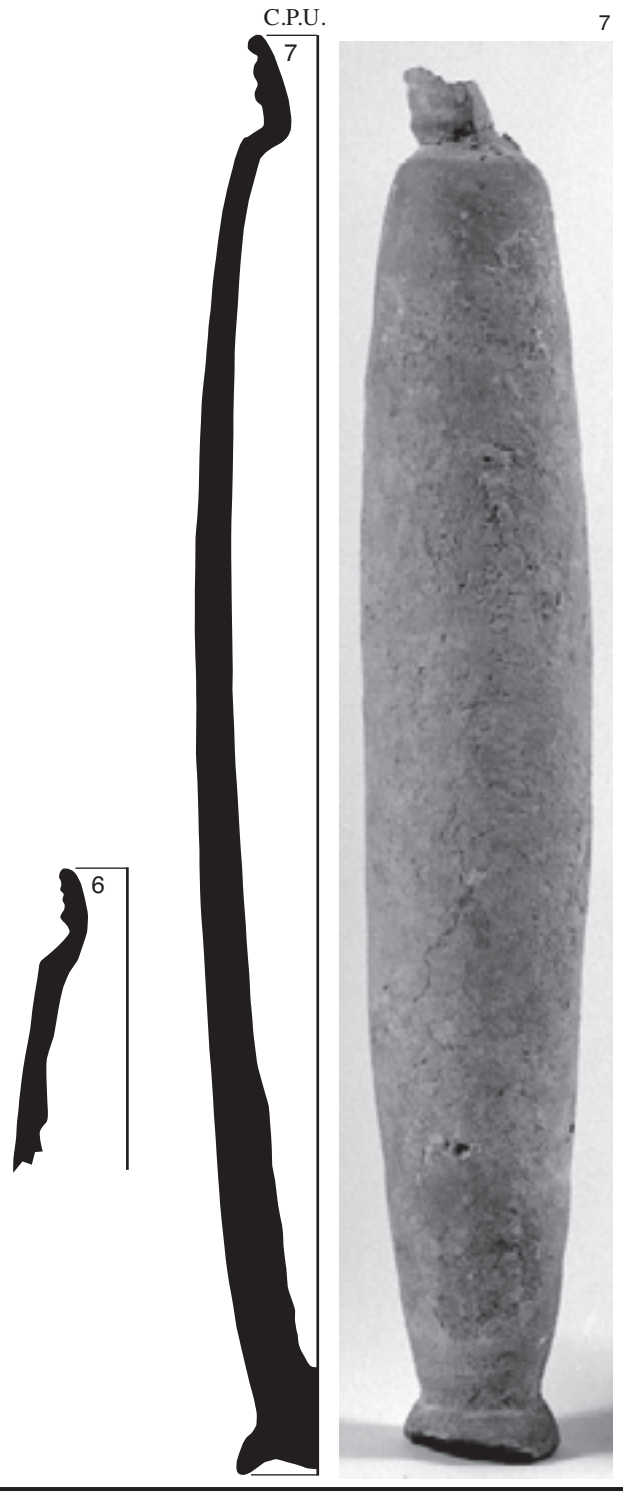
115 C 3 | 115 D 2

edh-Dhiba'i, AL-GAILANI 1965, Pl. 1 : 4.




DIYALA | N. A. P. | S. A. P.

## 115 A 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | D | 105416 | TB 2 | 2 | 5YR 6/4 | ø rim : 56. Exc. Taha Baqir, 1941. Drawn at the IM. |
| DIYALA | | | | | | |
| 2 | Ish | P. 32 | Kititum | III or IV | - | ø rim : 57. *OIP* 63, Pl. 170 : C.208.320. |

## 115 A 3

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 3 | D | 105407 | TB 2 | 2 | 7.5YR 6/4 | ø rim : 45. Burial 1. Exc. Taha Baqir, 1941. Drawn at the IM. |

## 115 B 2

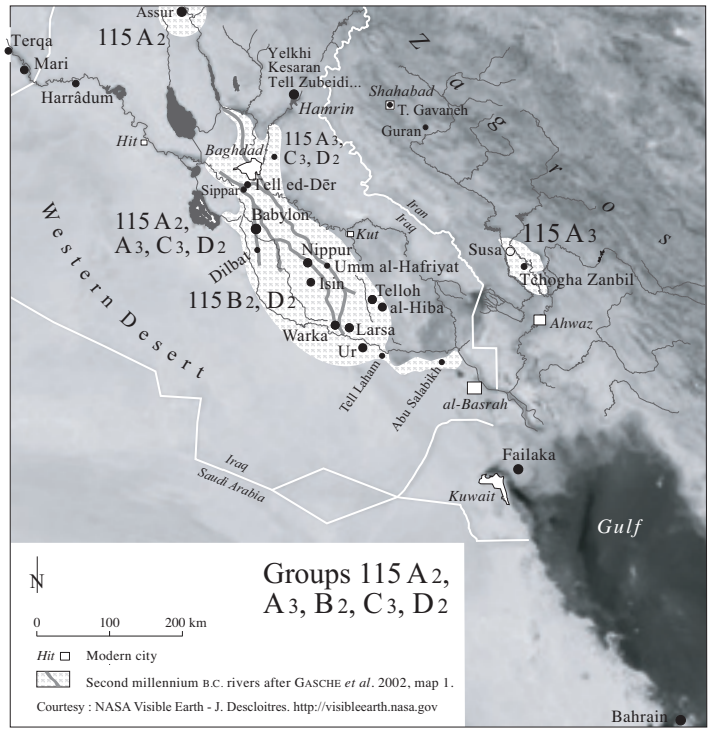
| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 4 | T | T. 1606 | - | - | - | ø rim : 36. Exc. Parrot, 1931-32. Louvre, AO 16838. Drawn at the Louvre. Photo Louvre. |

## 115 C 3

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 5 | D | 101972 | A | Ig | 5YR 6/6 | ø rim : 55. Burial D.120 probably dug from Ig. SALLABERGER 1996, Pl. 5 : 1. |

## 115 D 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 6* | D | 100809 | A | Ii | 7.5YR 6/4 | ø rim : 36. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 7 | L | L. 344 | - | - | - | ø rim : 55. Exc. Parrot, 1933. Louvre, AO 17060. Drawn at the Louvre. PARDO 1979, Pl. 30. |




10 cm

(Photos at various scales)

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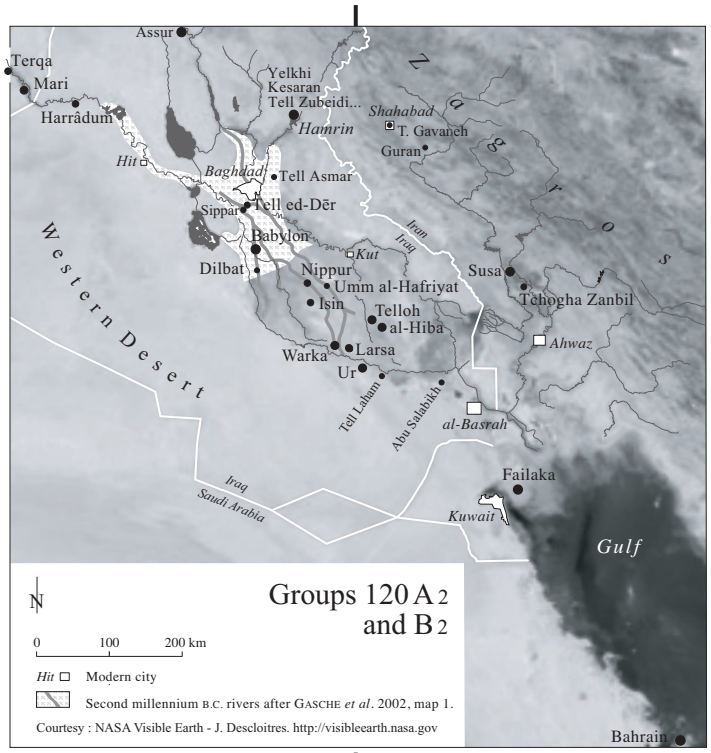
# 120 A 2

# 120 B 2

—1500

C.P.U.

—1600




N. A. P. M. E. N. A. P. M. E.

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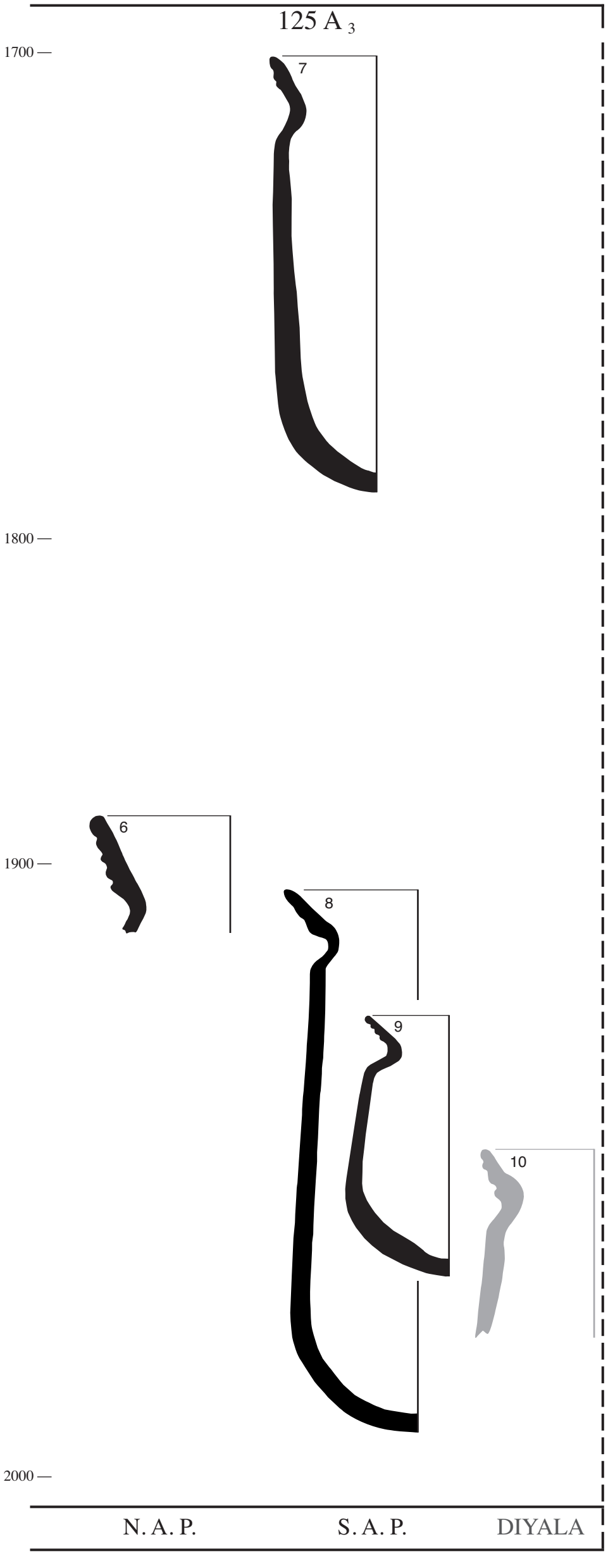



# PLATE 72

## 120 A 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | D | 105406 | TB 2 | 2 | 7.5YR 7/4 | ø rim : 70. Burial 1. Exc. Taha Baqir, 1941. Drawn at the IM. SALLABERGER 1996, Pl. 5 : 2. |
| MIDDLE EUPHRATES | | | | | | |
| 2 | al-Sh | - | - | - | - | ø rim : ± 73. Burial. SABAH JASIM ABDUL-AMIR 1988, fig. 60 : 12. |

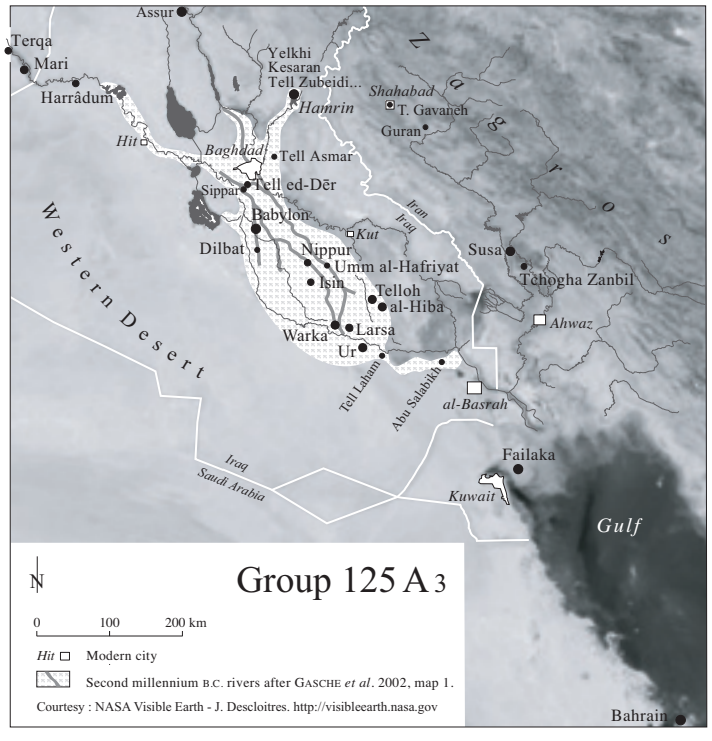
## 120 B 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 3 | D | 104435 | E | IIId | 5YR 6/6 | ø rim : 65. Burial D.276 dug from IIId. *MHEM* 1, Pls. 15 and 34 : 4. |
| 4* | D | 104443 | E | IIId | 5YR 6/6 | ø rim : 65. Burial D.276 dug from IIId. *MHEM* 1, Pls. 15 and 34 : 3. |
| MIDDLE EUPHRATES | | | | | | |
| 5 | al-Sh | - | - | - | - | ø rim : ± 36. Burial. SABAH JASIM ABDUL-AMIR 1988, fig. 60 : 14. |

## 125 A 3

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 6* | D | 103571 | A | IIIb | 10YR 7/3 | ø rim : 115. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 7 | N | 2N 944 | TB | II 1 | buff | ø rim : 89. *OIP* 78, Pl. 84 : 8 (complete shape provided by OI, Chicago). |
| 8 | N | 17 N 70 | WC-3 | VB | pink | ø rim : 110. |
| 9 | N | 3P 326 | TB | V or VI | beige | ø rim : 110. Burial 3B 63 dug from V or VI. *OIP* 78, Pl. 84 : 3. |
| DIYALA | | | | | | |
| 10 | Yel | 31 | B | VII | *cuoio* | ø rim : 95. BERGAMINI 2002-03, Pl. 9 : 20. |

C.P.U. = Chronological Position Uncertain




10 cm

(Photos at various scales)

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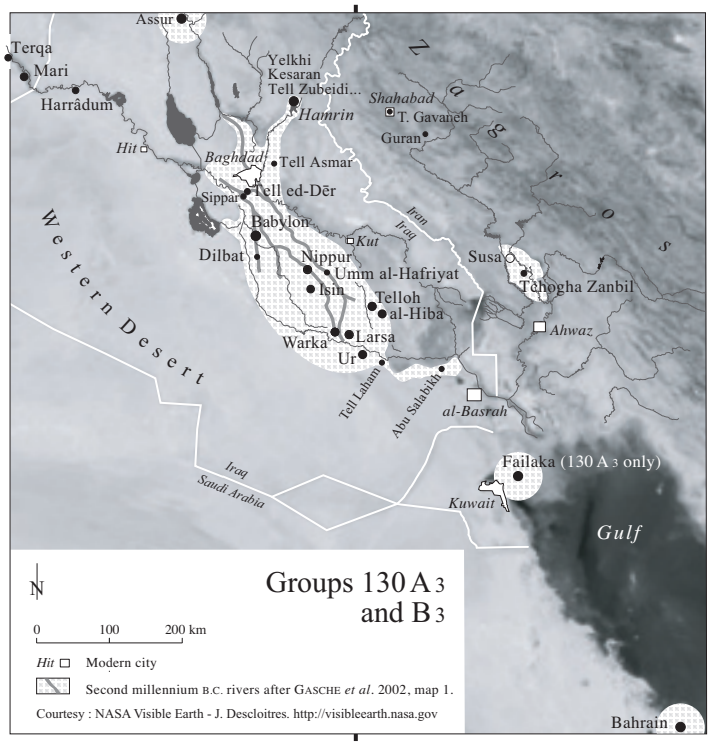
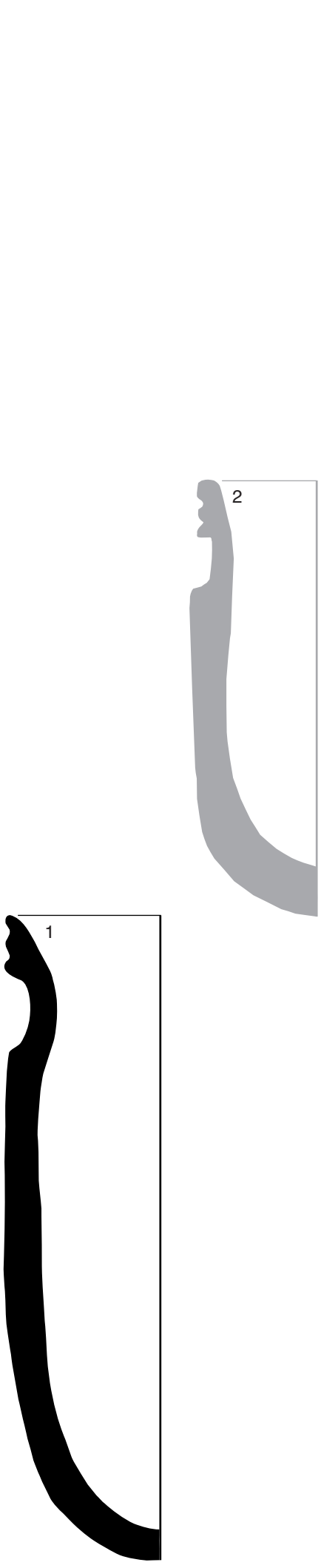
125 B 3 | 130 A 3 | 130 B 3

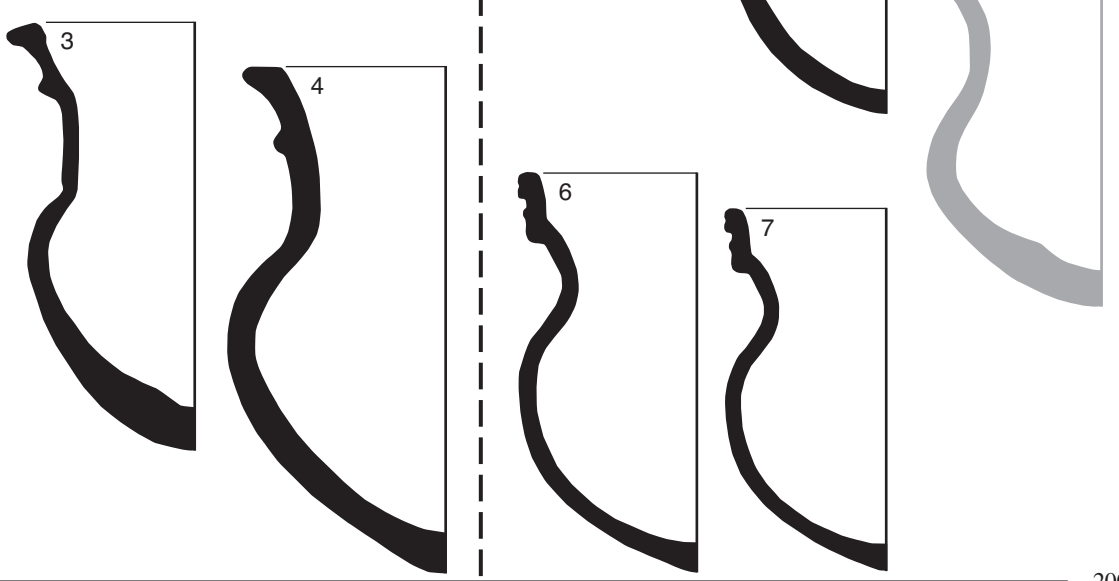
—1700




—1800

—1900




—2000

S. A. P. DIYALA | S. A. P. | S. A. P. DIYALA

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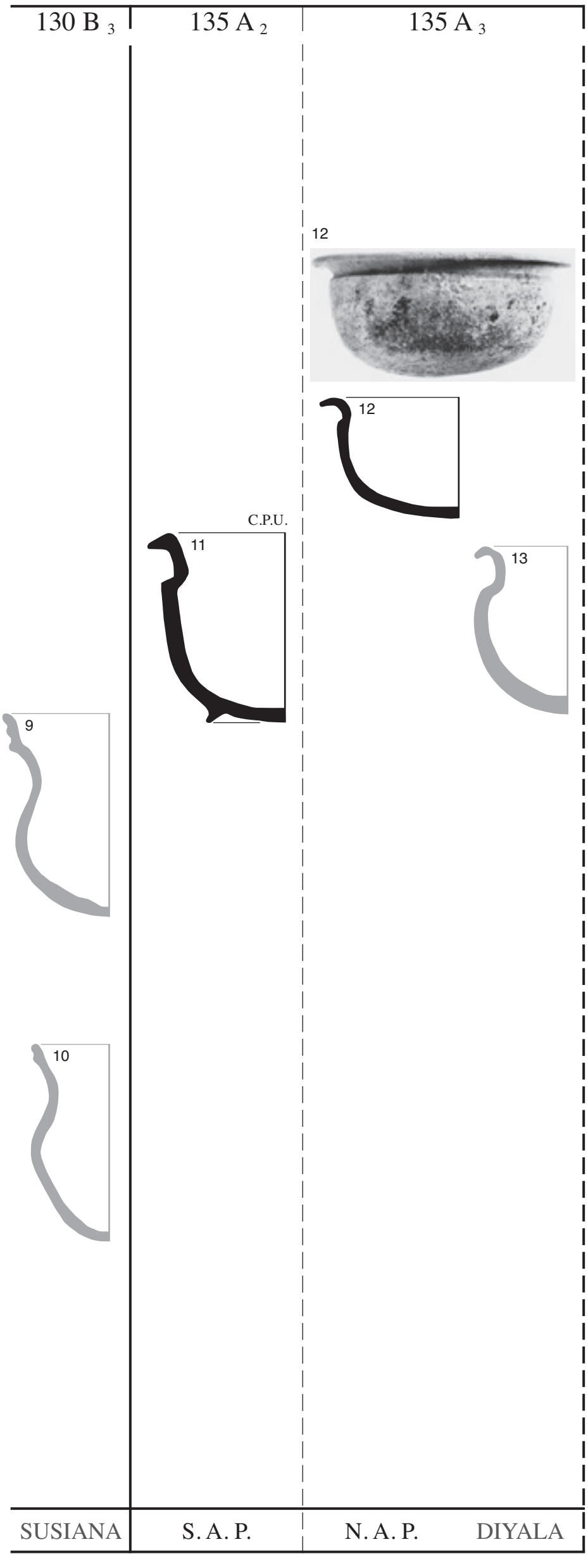


## 125 B 3

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | N | 2N 943 | TB | IV 2 | pinkish-buff | ø rim : 110. *OIP* 78, Pl. 84 : 7 (complete shape provided by OI, Chicago). |
| DIYALA | | | | | | |
| 2 | As | As. 31 : P. 75 | Outside P 30 : 4 | | - | ø rim : 85. *OIP* 63, Pl. 170 : C.206.510 (Early Larsa). |

## 130 A 3

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 3 | N | 18 N 135 | WF | IX | red | ø rim : 100. *OIP* 129, Pl. 127 : 1. |
| 4 | I | IB 276a | *SA* | ±70cm below surface | *gelblich-grau* S : *gelbl.-grün* | ø rim : 108. Burial S 16. *Isin* 1, 56, 59, Pl. 27. |

## 130 B 3

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 5 | W | 19789e | Sînkāšid | 1 | *hell-gelb* | ø rim : 88. Burial 34, under Room 5 of the palace. *AUWE* 10, Pl. 17 : Grab 34e = VAN ESS 1988a, fig. 12 : 102 = *UVB* 17, 38-39, Pl. 18 : d and 23 : b. |
| 6 | W | 25009 | P 6 *Areal* 1 | 3 | *hell-ziegelrot* S : *creme-roséfarbig* | ø rim : 93. Burial 33. *AUWE* 10, Pl. 16 : b = VAN ESS 1993, fig. 9 : 143. |
| 7 | W | 25080 | P 6 *Areal* 2 | 3 | *rötlich* S : *creme-roséfarbig* | ø rim : 83. Burial 13A. *AUWE* 10, Pl. 9 : f = VAN ESS 1993, fig. 15 : 181. |
| DIYALA | | | | | | |
| 8 | As | As. 31 : P. 110 | M 32 : 11 | - | - | ø rim : 100. *OIP* 63, Pl. 163 : B.645. 540a (Ur III). |
| SUSIANA | | | | | | |
| 9 | S | GS-7060 | B | VI | *jaunâtre* | ø rim : 86. *MDP* 47, Pl. 16 : 9. |
| 10 | S | GS-7054 | B | VII | *jaunâtre* | ø rim : 62. *MDP* 47, Pl. 16 : 12. |

## 135 A 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 11 | L | L. 146 | - | - | 10YR 8/2 | ø rim : 113. Burial 30. Exc. Parrot, 1933. Louvre, AO 17029. Drawn at the Louvre. PARDO 1979, Pl. 16. |

## 135 A 3

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 12 | D | 102360 | A | Ii | 2.5Y 8/4 | ø rim : 104. Burial D.160 probably dug from Ii. Interior and exterior covered with powdery reddish-yellow paint (5YR 6/6). |
| DIYALA | | | | | | |
| 13 | As | As. 31 : P. 90 | M | - | - | ø rim : 77. *OIP* 63, Pl. 162 : B.644.540 (Larsa). |

C.P.U. = Chronological Position Uncertain

10 cm

(Photos at various scales)

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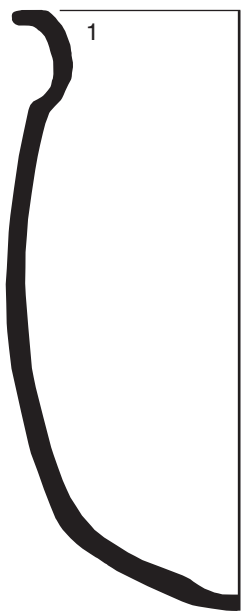
# 135 B 3

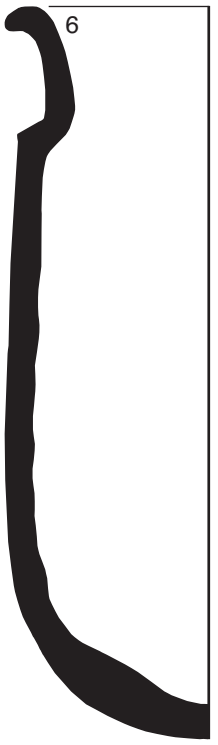
1


1

—1700

7

C.P.U.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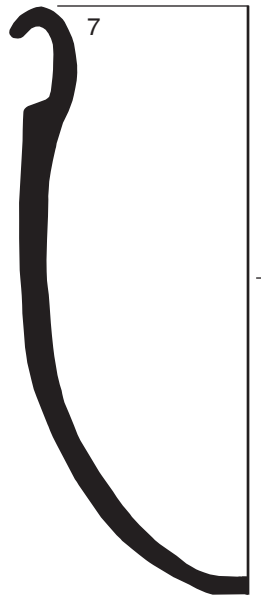
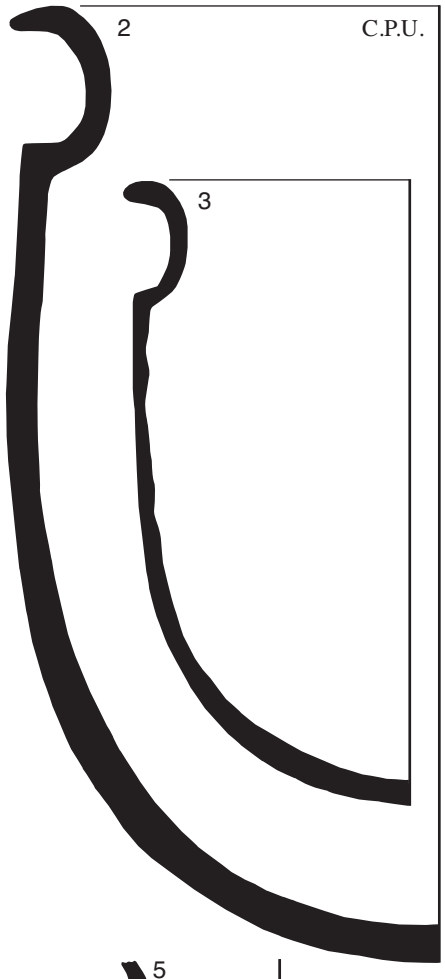
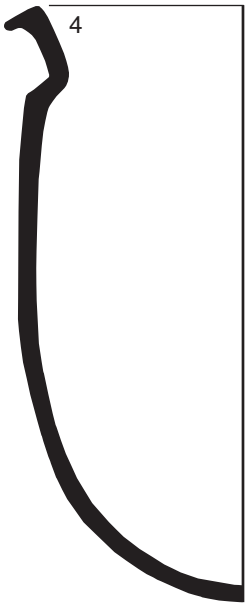

7

—1800


2 C.P.U.


3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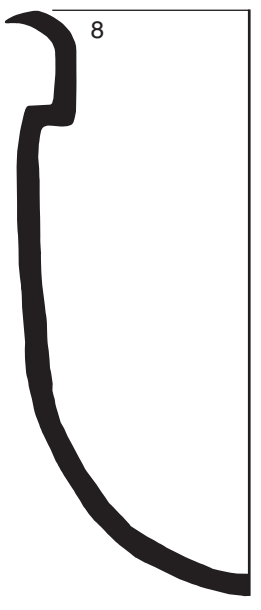
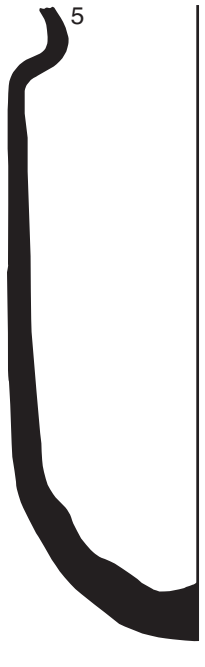
4

6


8

—1900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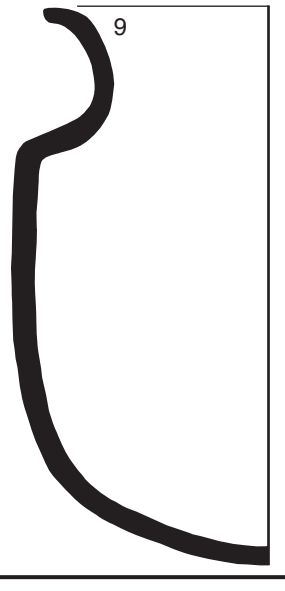
9

—1950

NORTHERN ALLUVIAL PLAIN

SOUTHERN ALLUVIAL PLAIN

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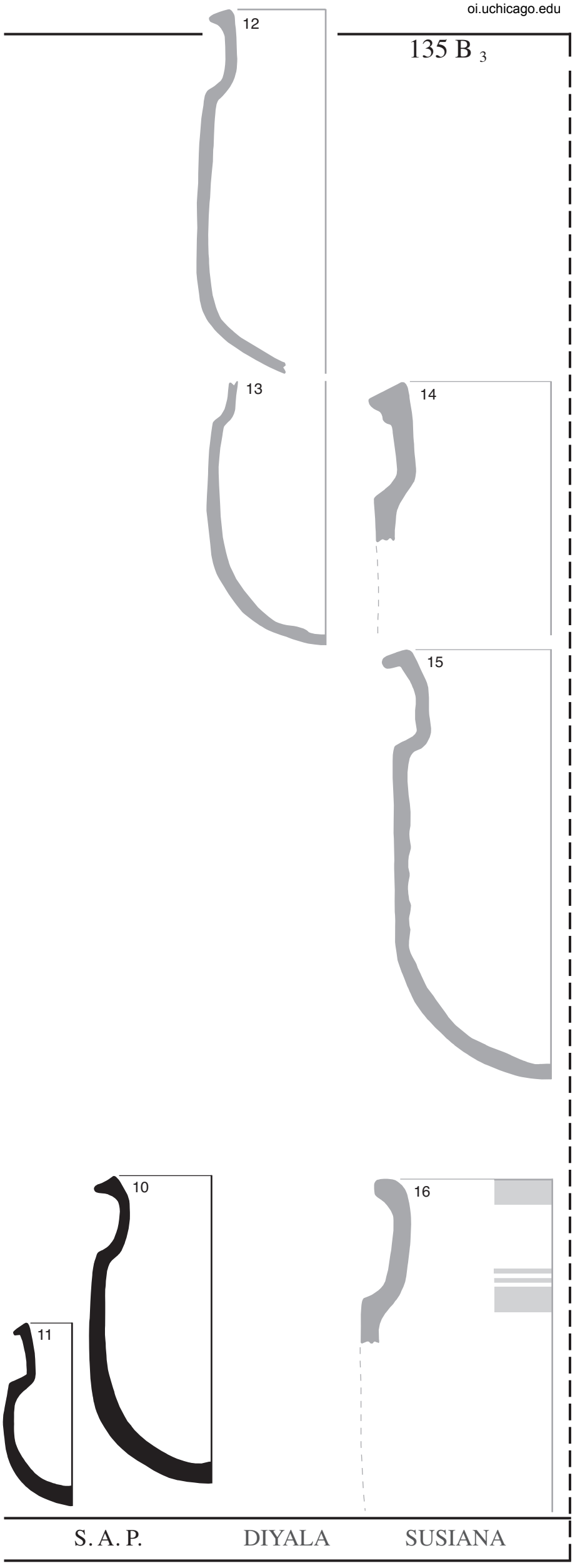
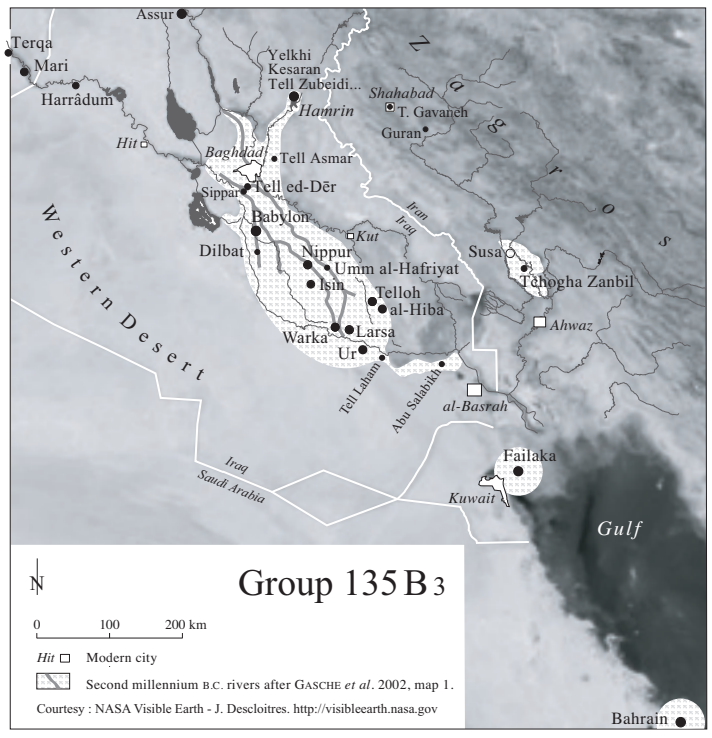



# PLATE 74

## 135 B 3

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | D | 102633 | A | Ig | 2.5Y 8/2 | ø rim : 118. Burial D.175 dug from Ig. |
| 2 | D | 105418 | TB 2 | 4 | 5YR 6/6 | ø rim : 222. Burial 2 found in Level 4. Exc. Taha Baqir, 1941. Drawn at the IM. |
| 3 | D | 103797 | A | IIc | 5YR 6/6 | ø rim : 146. Burial D.240B dug from IIc. *TD* 4, Pl. 20 : 6. |
| 4 | D | 104095 | A | IIc | 10YR 8/2 | ø rim : 125. Burial D.204 dug from IIc. |
| 5* | D | 104160 | A | IIIb | 5YR 7/4 | ø rim : -. Burial D.271 dug from IIIb. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 6 | L | L. 428 | - | - | 10YR 8/3 | ø rim : 104. Burial 128. Exc. Parrot, 1933. Louvre, AO 17056. Drawn at the Louvre. PARDO 1979, Pl. 36. |
| 7 | U | 1 UmH 160 | A | II | 10YR 7/2 | ø rim : 124. Burial 14 dug from II. |
| 8 | H | 5 H 18 | B | - | - | ø rim : 128. Burial 5 HB 9. |
| 9 | N | 2N 989 | TB | IV 2 | dark brown | ø rim : 114. Incised lattice pattern on burnished surface. *OIP* 78, Pl. 84 : 5. |
| 10 | N | 3P 253 | TB | VI 2 | light tan S : buff | ø rim : 98. *OIP* 78, Pl. 84 : 1. |
| 11 | N | 2N 8 | TB | IV 2 | buff | ø rim : 46. *OIP* 78, Pl. 84 : 6. |
| DIYALA | | | | | | |
| 12 | Yel | y 437 | B | Va | *giallo-verdastro* | ø rim : 97. GABUTTI 2002-03, Pl. 66 : 7. |
| 13 | Yel | 168 | B | Vc | *cuoio scuro* | ø rim : -. GABUTTI 2002-03, Pl. 66 : 9. |
| SUSIANA | | | | | | |
| 14 | S | GS-7202 | B | V | *jaunâtre* | ø rim : 148. *MDP* 47, Pl. 17 : 1. |
| 15 | S | GS-6684 | B | VI | *rougeâtre* | ø rim : 140. Burial S.166 dug from B VI. *MDP* 47, Pls. 17 : 4 and 61 : 3. |
| 16 | S | GS-7196 | B | VII | *jaunâtre* | ø rim : 148. *MDP* 47, Pl. 17 : 9. Bands on rim, neck and shoulder in dark paint. |

C.P.U. = Chronological Position Uncertain




10 cm

(Photos at various scales)

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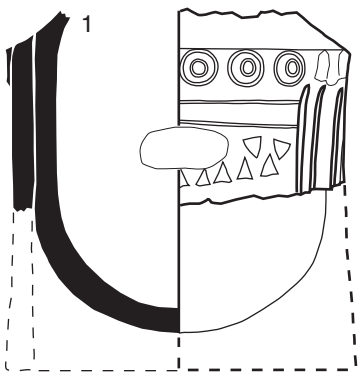
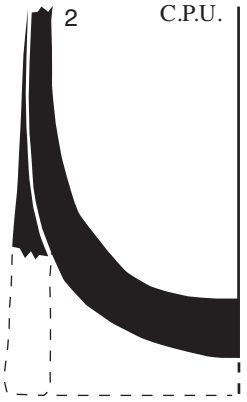
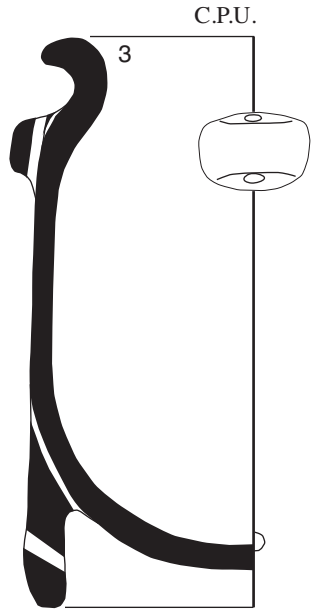

1

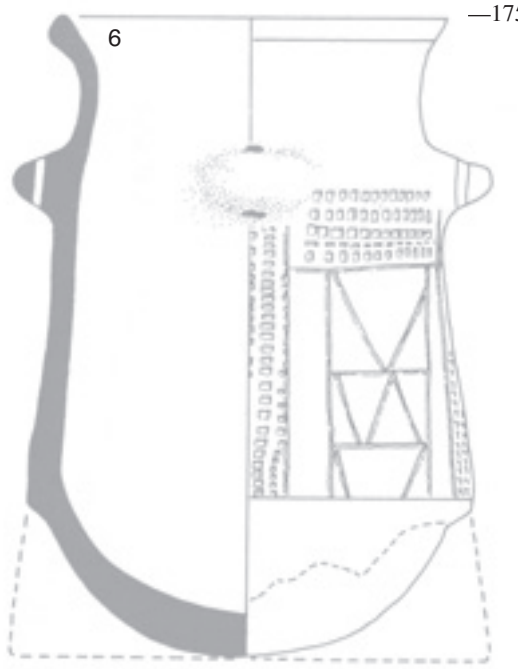
1

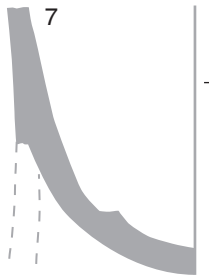
2

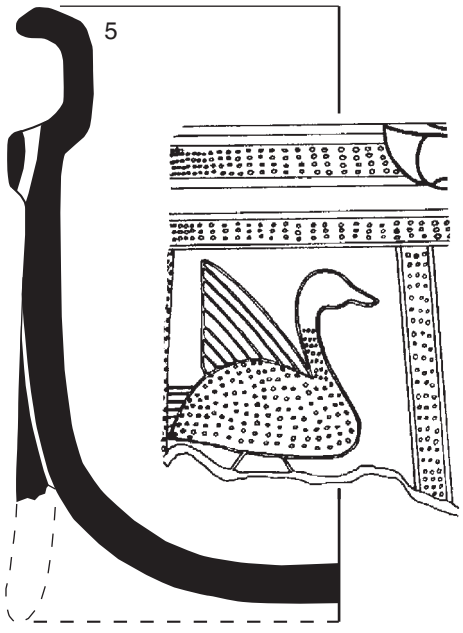

2 C.P.U.


3 C.P.U.

3


6 —1750


7 —1800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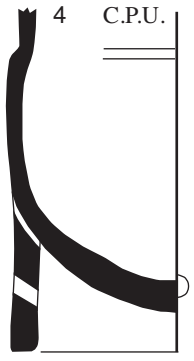
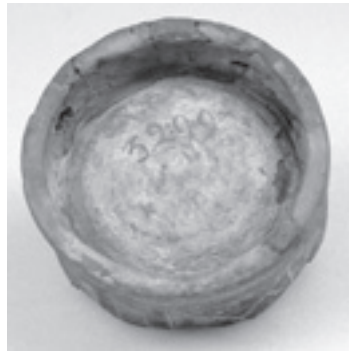

4 C.P.U.

4 —1900


4

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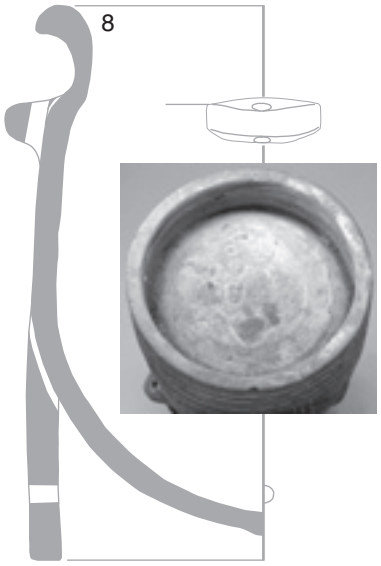
# 135 C 2

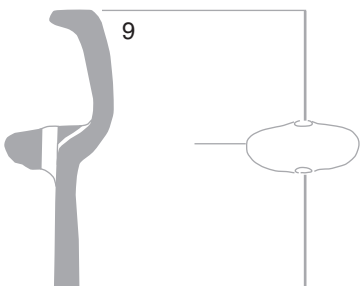
C.P.U.



8

8

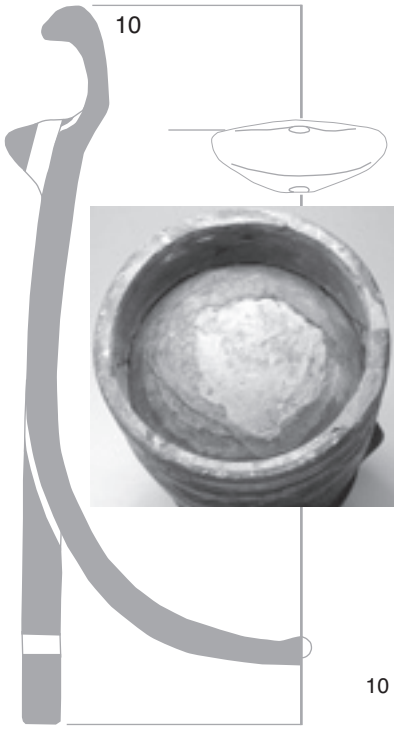
C.P.U.



9

9

C.P.U.



10

10

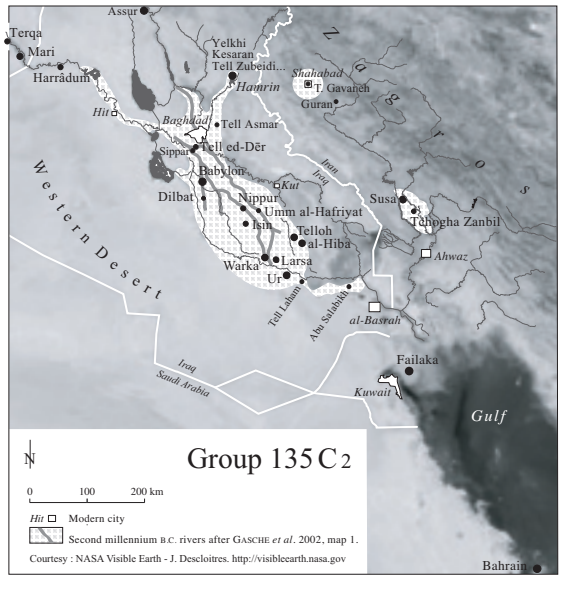
SUSIANA

# PLATE 75

## 135 C 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | D | 102384 | A | IIa | 10YR 5/4 | ø rim : -. 4 vertically pierced lugs at the shoulder and 2 knobs at the middle of the body. After it was broken, the vessel was used as a ladle for bitumen. Incised surface decoration. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 2 | T | - | *Tell des Tablettes* | - | *grise* | ø rim : -. Exc. Cros 1903. Louvre, AO 4117. Drawn at the Louvre. CROS 1907, Pl. 3 : 2 ; *id.* 1910-14, 236-237, Pl. 4 : 2 ; PARROT 1948, 292 ; BÖRKER-KLÄHN 1970, 34, Pl. 20-21 (Cf2). White-filled, incised and painted surface decoration not shown. |
| 3 | J | - | - | - | *grise* | ø rim : 113. Louvre, AO 4800 (bought in 1911 and said to have come from Umma). Drawn at the Louvre. Mentioned by FRANKFORT 1940, 213, n. 53 and BÖRKER-KLÄHN 1970, 51 (C 65). White-filled, incised and painted surface decoration. |
| 4 | T | - | *Tell des Tablettes* | - | *grise* | ø rim : -. Exc. de Sarzec. Louvre, AO 3299. Drawn at the Louvre. DE SARZEC 1884-1912, Pl. 44bis : 6 ; BÖRKER-KLÄHN 1970, 41, Pl. 31 (Cf19). White-filled, incised and painted surface decoration. |
| 5 | N | 2N 33 | TB | IV 1 | greenish-gray | ø rim : 109. *OIP* 78, Pl. 92 : 12. White-filled, incised surface decoration. |
| DIYALA | | | | | | |
| 6 | Hal | 258-1 | A | II | - | ø rim : 108. Iraq Museum 86129. GHASSAN 1995, Pl. 73 : 105. White-filled, incised surface decoration. |
| 7 | Yel | 43 | B | VIa | *grigio* | ø rim : -. GABUTTI, 2002-03, Pl. 140 : 1. Incised surface decoration not shown. |
| SUSIANA | | | | | | |
| 8 | S | - | Donjon | - | *grise* | ø rim : 121. Exc. de Mecquenem. Louvre, Sb 9315. Drawn at the Louvre. DE MECQUENEM 1934, 227, fig. 75 : 6 ; BÖRKER-KLÄHN 1970, 40, Pl. 29 (C 15). White-filled, incised and painted surface decoration. |
| 9 | S | - | Apadana *Parvis central* | - | *rouge* - | ø rim : 135. Exc. de Mecquenem. Louvre, Sb 385. Drawn at the Louvre. DE MECQUENEM 1924, 111, fig. 3 ; BÖRKER-KLÄHN 1970, 50-51, Pl. 39 (C 62). White-filled, incised and painted surface decoration. |
| 10 | S | - | | - | *grise* | ø rim : 138. Exc. de Morgan. Louvre, Sb 2852. Drawn at the Louvre. DE MECQUENEM 1934, 210-211, Pl. XI. BÖRKER-KLÄHN 1970, 35-36, Pls. 22-23 (C 5). White-filled, incised and painted surface decoration. |

C.P.U. = Chronological Position Uncertain




10 cm

(Photos at various scales)

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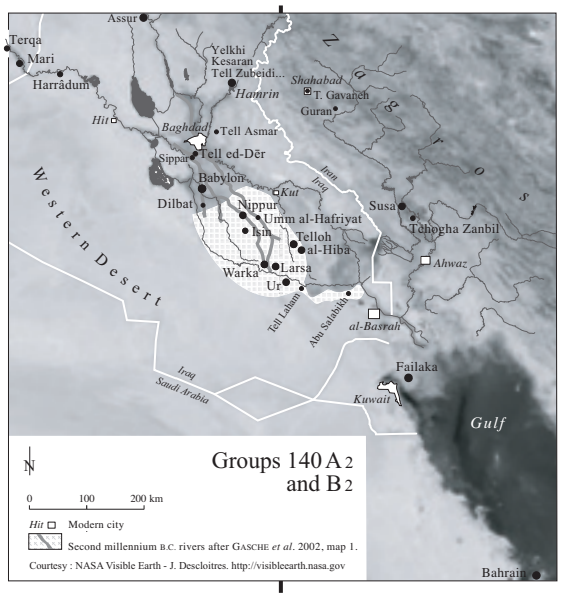
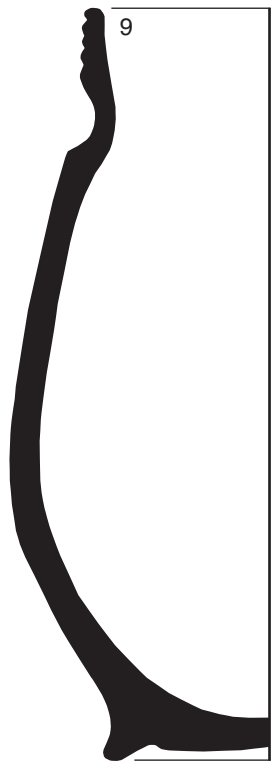
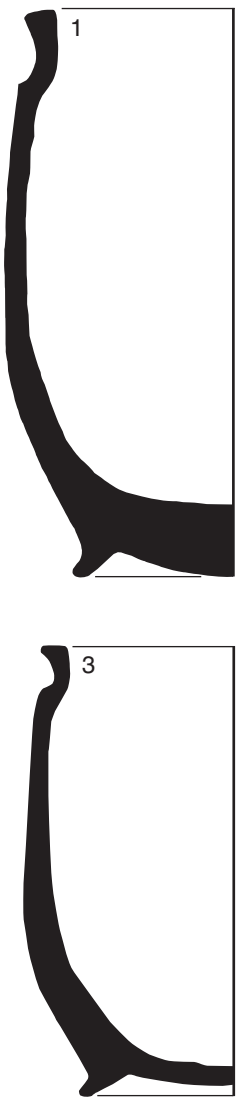
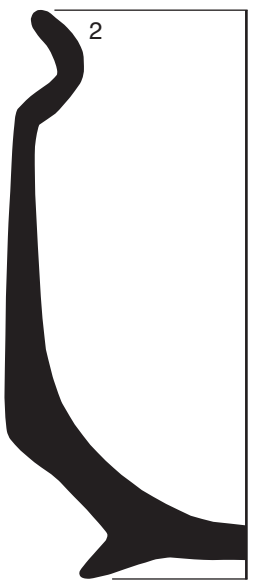
140 A 2 | 140 B 2 | 140 C

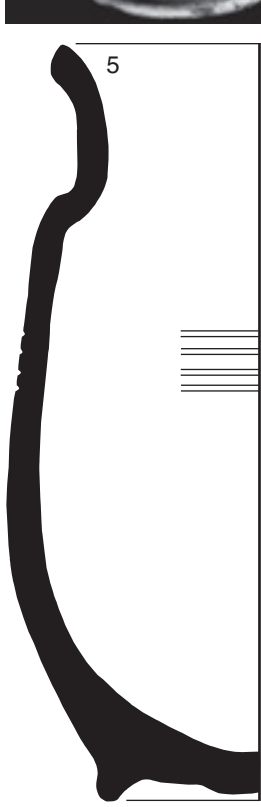


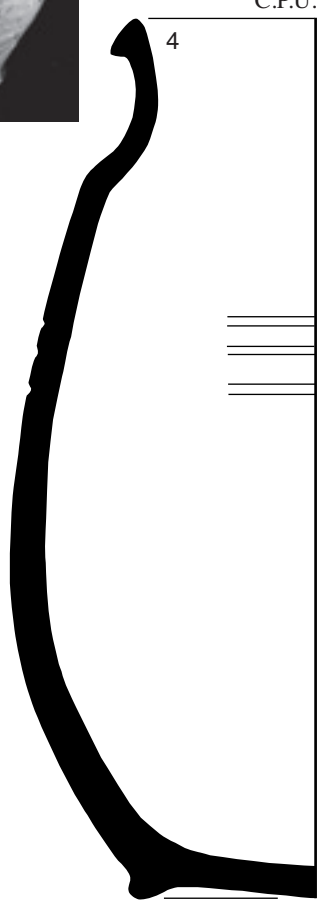












—1800

—1900

C.P.U.

S. A. P. | SOUTHERN ALLUVIAL PLAIN | N. A. P. | S. A. P.

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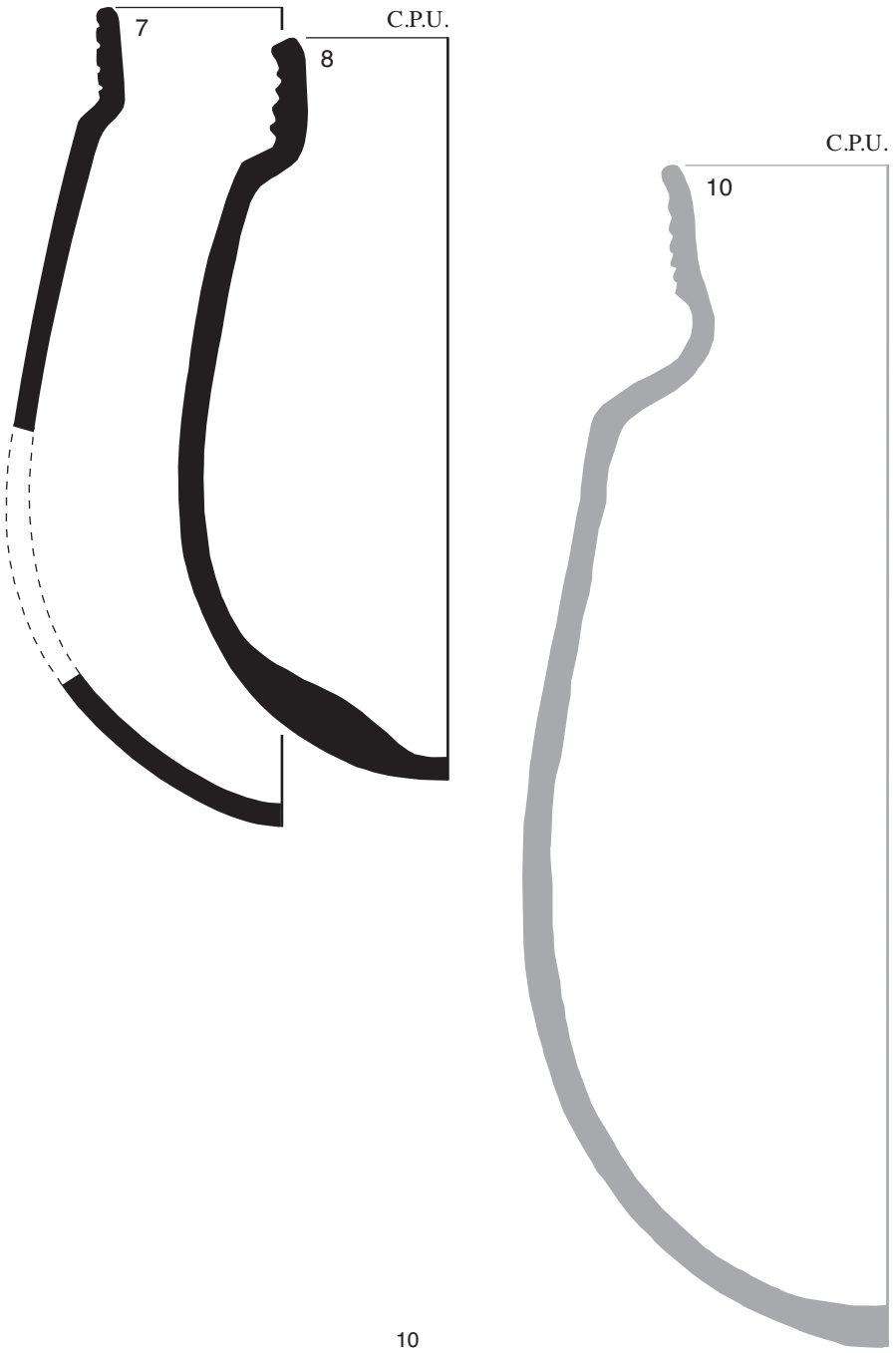
# PLATE 76

## 140 C




10

## 140 A 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | N | 2N 1064 | TB | III | tan | ø rim : 109. Burial 1B 290-91 dug from III. *OIP* 78, Pl. 84 : 13 (complete shape provided by OI, Chicago). Vertically burnished lines not shown. |
| 2 | I | IB 1409 | *NOA* I | +6,70m to +6,80m | 5YR 6/6 S : 10YR 8/4 | ø rim : 113. Found near a destroyed grave (expedition records). *Isin* 3, 69, 80, Pl. 30 : 8. |
| 3 | N | 2P 513 | TB | III 2 | tan S : buff | ø rim : 105. *OIP* 78, Pl. 84 : 11. |

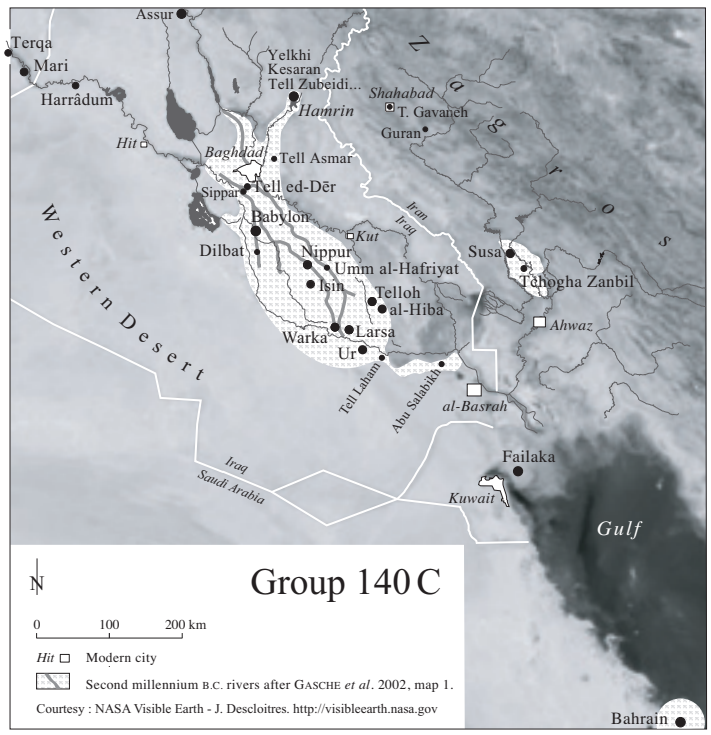
## 140 B 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 4 | W | 20295 | Sînkāšid | 2a | *grünlich-rot* | ø rim : 110. VAN ESS 1988a, fig. 18 : 131. |
| 5 | U | 1 UmH 311 | A | II | 10YR 6/4 | ø rim : 105. Burial 30 dug from II. |

## 140 C

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 6* | D | 102917 | A | Ik | 7.5YR 6/4 | ø rim : 120. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 7 | I | 0278 | *NOA* I | 5,93m | 7.5YR 7/6 S : 7.5YR 8/4 | ø rim : 97. *Gruft* I. *Isin* 3, 19, Pl. 26 : 1. |
| 8 | L | L. 347 | - | - | 7.5YR 2/2 | ø rim : 93. Burial 92. Exc. Parrot, 1933. Louvre, AO 17057 = AO 24430. Drawn at the Louvre. PARDO 1979, Pl. 32. |
| 9 | I | 0199 | *NA* II | 6,15m | *hellgelb* | ø rim : 100. |
| SUSIANA | | | | | | |
| 10 | S | - | - | - | 5YR 7/6 | ø rim : 114. Louvre, Sb 19251. PONS 1991, 50-51, Pl. 26 = perhaps DE MECQUENEM 1943, fig. 65 : 32. |

C.P.U. = Chronological Position Uncertain




10 cm

(Photos at various scales)

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—1500

145 A 2

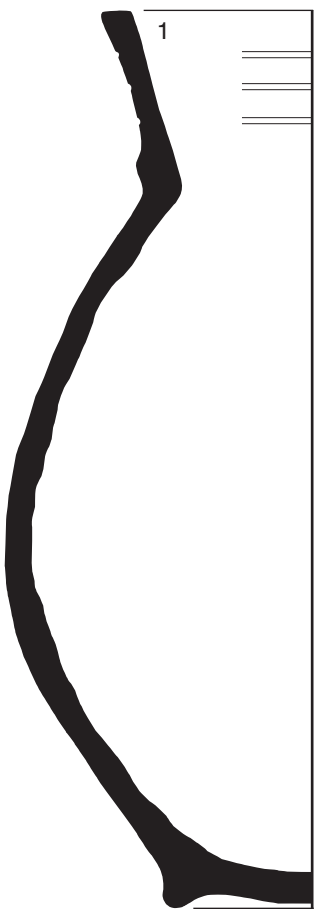
145 A 3

150 A 2

—1600

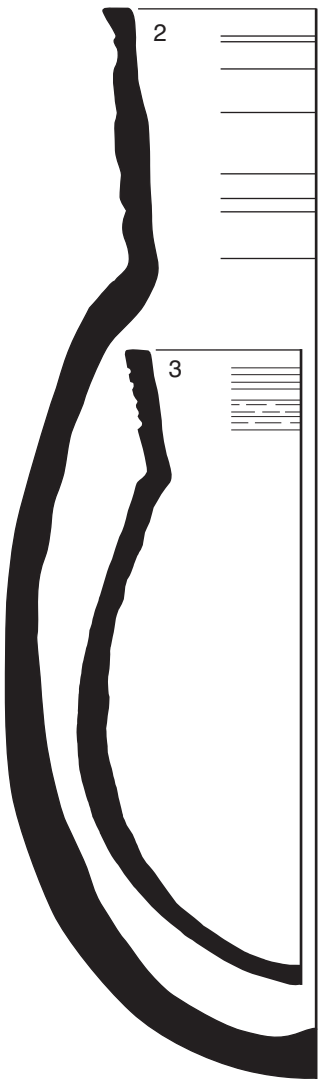
1

1



2

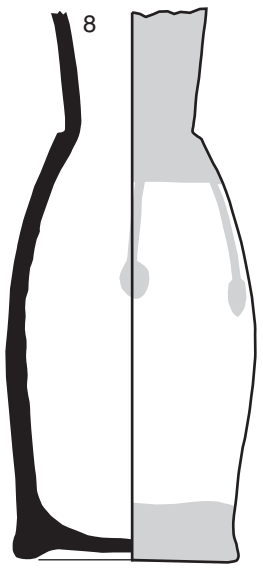
3



3

—1700

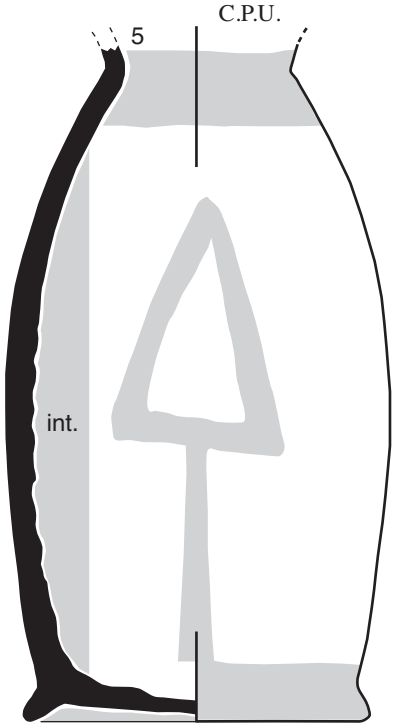
8



C.P.U.

5

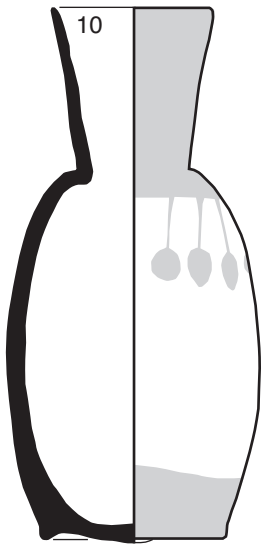
int.



5

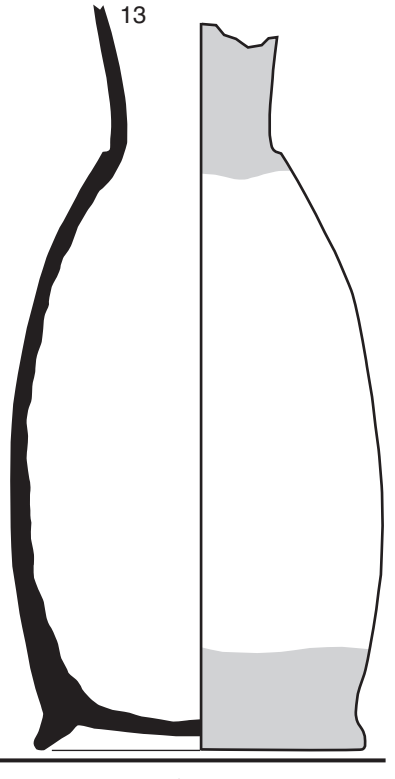
—1600

10



10

13



—1700

N. A. P.

N. A. P.

N. A. P.

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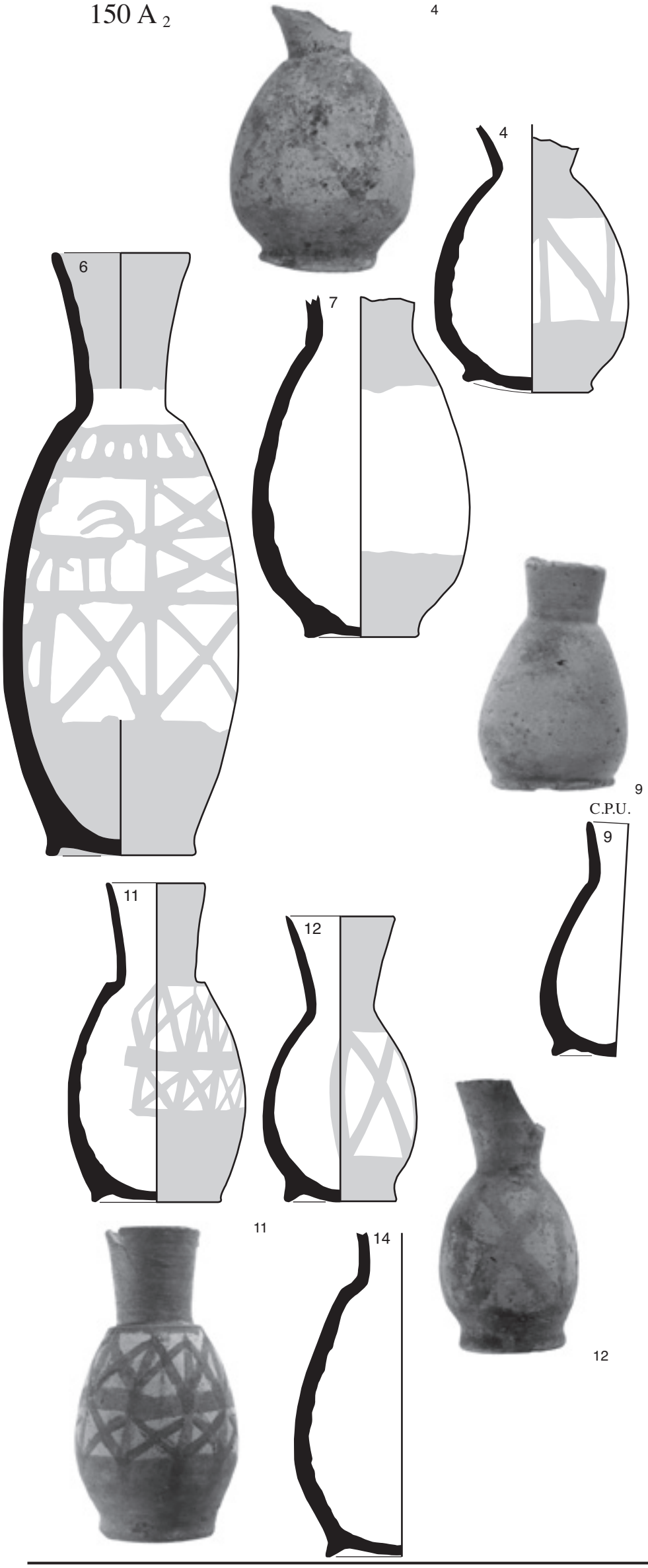





# PLATE 77

## 145 A 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | D | 101757 | A | Ie | 5Y 7/3 | ø rim : 109. Burial D.56 dug from Ie. |

## 145 A 3

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 2 | Sip | 110 | U/106 | - | - | ø rim : 114. *Sumer* 54, Pls. 39 : 6 and 51 : 110. |
| 3 | D | 101231 | A | Ic | 10YR 7/3 | ø rim : 90. *TD* 2, Pl. 23 : 9. Also reproduced in VAN ESS 1991a, Pl. 109 : 46. |

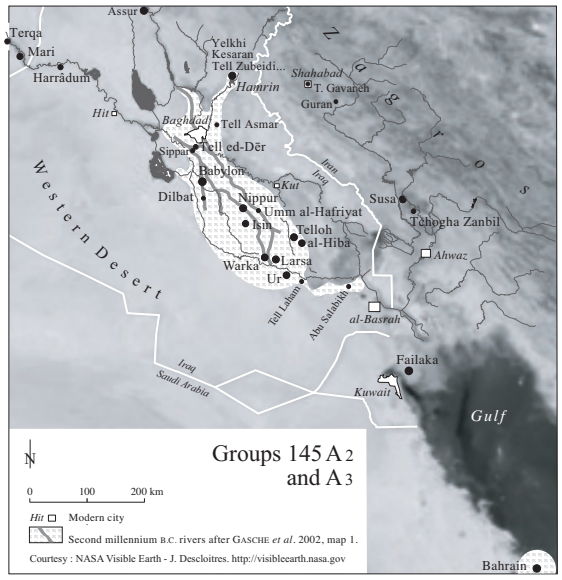
## 150 A 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 4* | D | 104004 | E | IIIb, c or d[1)] | 7.5YR 6/4 | ø rim : -. *MHEM* 1, Pl. 37 : 8. Geometric design on exterior in dark paint. |
| 5 | D | 105402 | TB 2 | 2 | 5Y 8/2 | ø rim : -. Exc. Taha Baqir, 1941. Spade of Marduk on exterior in dark paint. Drawn at the IM. |
| 6 | Sip | 1541 | U/106 | - | - | ø rim : 56-60. *Sumer* 54, Pls. 54 and 55. Geometric and figurative design on exterior in dark paint. |
| 7* | D | 107907 | F | Ib | 10YR 8/2 | ø rim : -. Wide bands on upper and lower body in dark paint. |
| 8 | D | 101363 | A | 0 | 10YR 7/4 | ø rim : -. Pit 1 (cf. *TD* 2, Plan 6) now attributed to Ensemble 0. Geometric design on exterior in dark paint. |
| 9 | D | 105405 | TB 3 | 1 | 2.5Y 8/2 | ø rim : 34. Exc. Taha Baqir, 1941. Unpainted. Drawn at the IM. |
| 10 | D | 101164 | A | Ic | 5YR 6/6 | ø rim : 44. *TD* 2, Pl. 22 : 3. Geometric design on exterior in dark paint. |
| 11 | D | 101226 | A | Ic | 5YR 6/6 | ø rim : 40. *TD* 2, Pl. 22 : 2. Geometric design on exterior in dark paint. |
| 12 | D | 101230 | A | Ic | 10YR 7/4 | ø rim : 44. *TD* 2, Pl. 22 : 1. Geometric design on exterior in dark paint. |
| 13* | D | 101916 | A | Ie | 5Y 8/2 | ø rim : -. Pit 2' dug from Ie. Wide bands on upper and lower body in dark paint. |
| 14* | D | 101823 | A | Ie | 7.5YR 8/4 | ø rim : -. From a small pit dug during the occupation of Ie. Unpainted. |

1) Not from IIIb-c as shown in *MHEM* 1, description of Pl. 37 : 8.

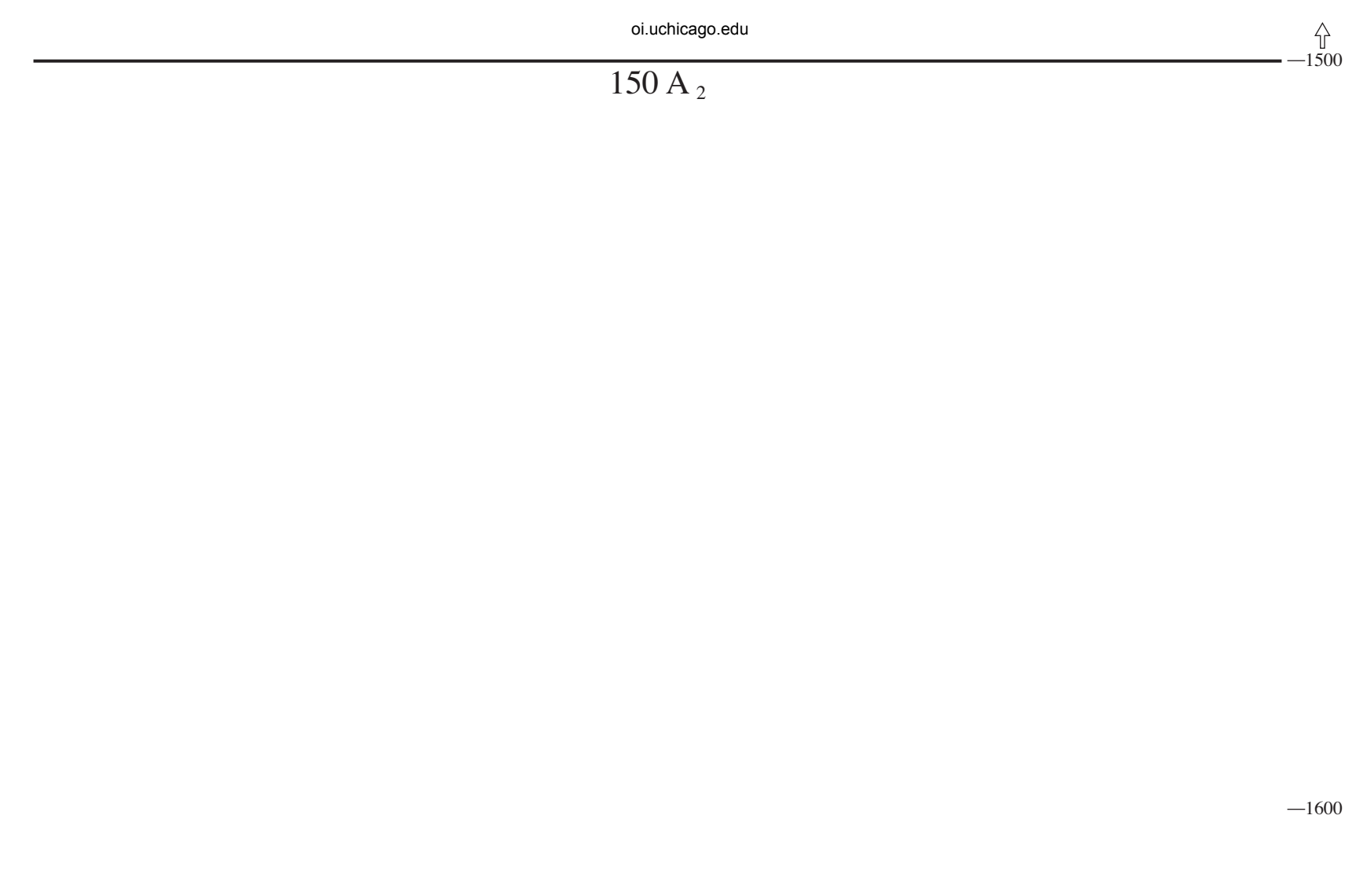
C.P.U. = Chronological Position Uncertain

Continued on Pl. 78




10 cm

(Photos at various scales)


1
2
3
4
5
6
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7
C.P.U.

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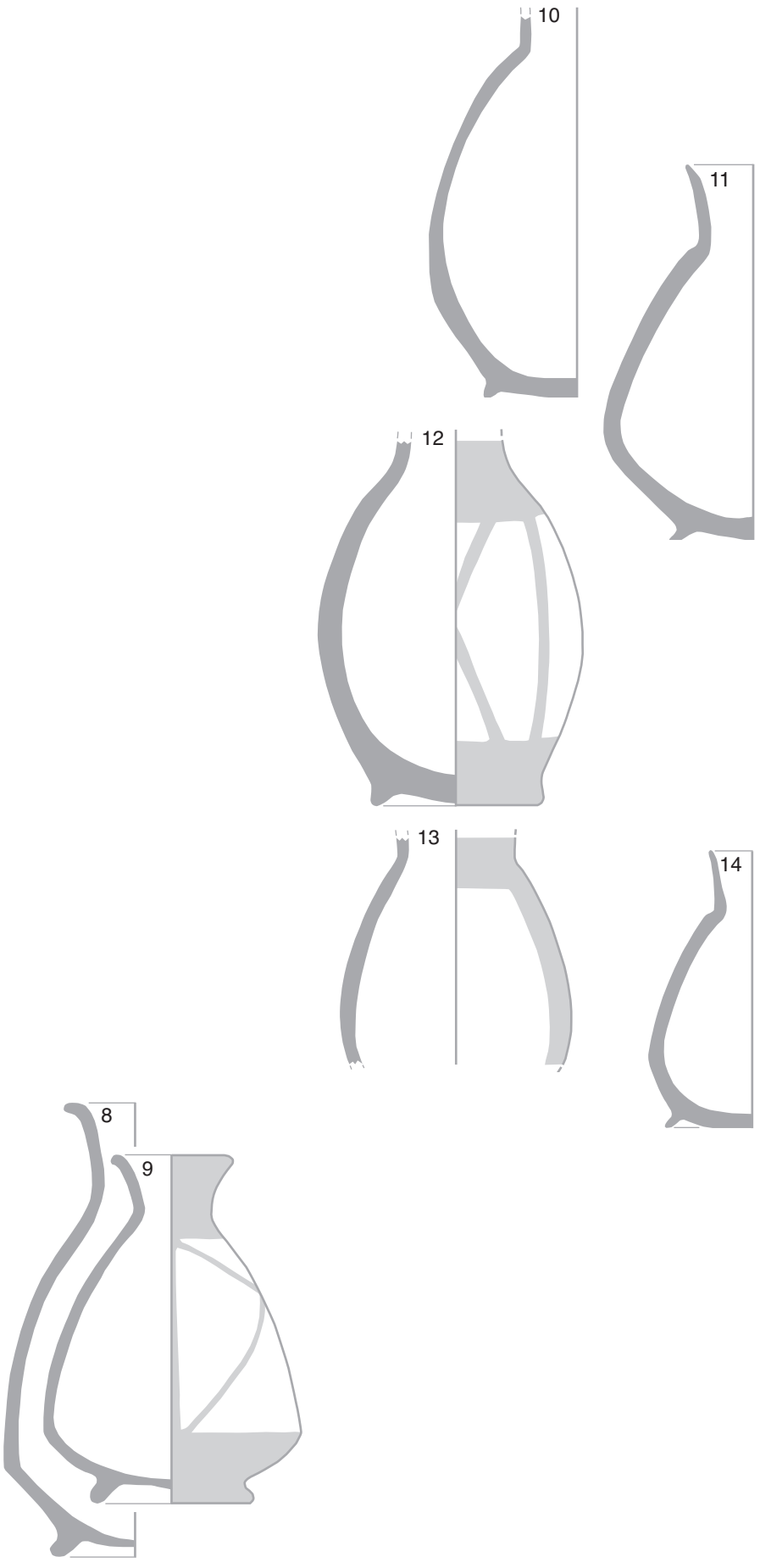



M. E. DIYALA

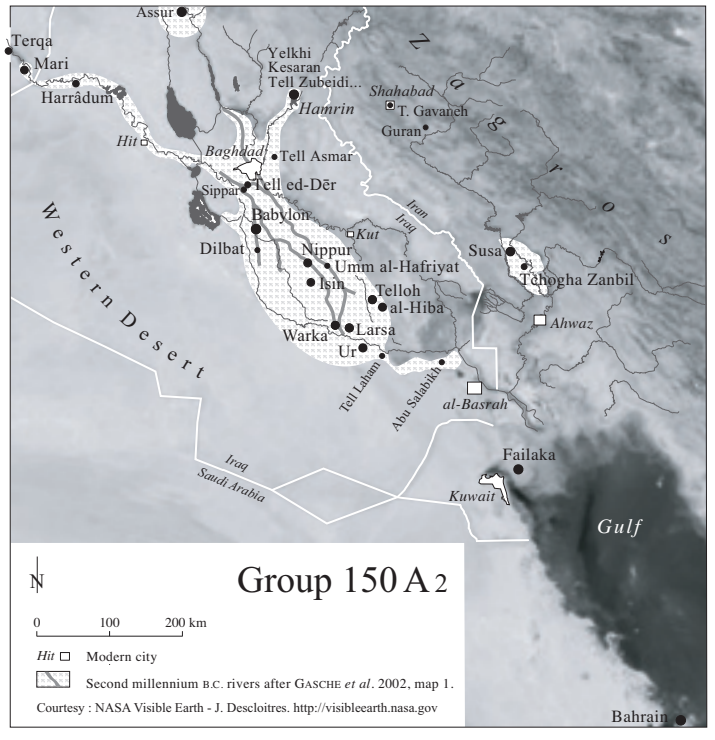
# PLATE 78

## 150 A 2

Continued from Pl. 77

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | I | IB 1455 | *NOA* III | 6,65m | 5YR 7/6<br>S : 5Y 8/2 | ø rim : -. *Isin* 3, 77-78, Pl. 29 : 8. Geometric design on exterior in dark paint ; interior painted. |
| 2 | N | 12 N 627 | WB | IV 6 | pink<br>S : cream | ø rim : -. FRANKE 1978, fig. 60 : 4b. Geometric design on exterior in dark paint. |
| 3 | N | 2N 1083 | TB | E | buff | ø rim : -. *OIP* 78, Pl. 91 : 15. Geometric design shown in McCONN 1952, fig. 5a, left. |
| 4 | N | B 114 | WB | IV 3 | yellowish buff | ø rim : -. Unpainted. FRANKE 1978, fig. 60 : 4a. |
| 5 | N | 2N 94 | TB | D | buff | ø rim : 54. McCONN 1952, *fig. 5a, right. OIP* 78, Pl. 91 : 16. Geometric design on exterior and over rim in dark paint. |
| 6 | L | L. 540 | *F.S.* | - 4,80m | - | ø rim : -. Exc. Parrot, 1967. MINSAER 1990, 18, Pl. 25 : k. CALVET *et al.* 2003, 327, fig. 32 : k. Geometric design on exterior and over rim in dark paint. |
| 7 | W | 20465,1 | Sînkāšid | 2 | *rot-grünlich* | ø rim : -. *UVB* 19, 39, Pl. 25 : f. VAN ESS 1988a, fig. 20 : 135. Unpainted. |
| MIDDLE EUPHRATES | | | | | | |
| 8 | M | 785 | *Palais* | - | - | ø rim : 43. PARROT 1959, fig. 90, Pl. 35. Geometric design on exterior in dark paint. |
| 9 | M | 766 | *Palais* | - | - | ø rim : 37. PARROT 1959, fig. 90, Pl. 35. Geometric design on exterior in dark paint |
| DIYALA | | | | | | |
| 10 | Yel | y 271 | A | IIIa | *giallo-verdastro* | ø rim : -. GABUTTI 2002-03, Pl. 74 : 13. Unpainted. |
| 11 | Ish | P. 14 | Kititum | IV or above | - | ø rim : 43. *OIP* 63, Pl. 166 : B.766.320b. Unpainted. |
| 12 | Yel | HY 400 | A | IVa | *cuoio* | ø rim : -. GABUTTI 2002-03, Pl. 74 : 14. Geometric design on exterior in dark paint. |
| 13 | Yel | y 326 | A | IVb-Va | *cuoio* | ø rim : -. GABUTTI 2002-03, Pl. 74 : 15. Geometric design on exterior in dark paint. |
| 14 | Ish | P. 58 | Kititum | III | - | ø rim : 28. *OIP* 63, Pl. 166 : B.766.320a. Unpainted. |

C.P.U. = Chronological Position Uncertain




10 cm

(Photos at various scales)

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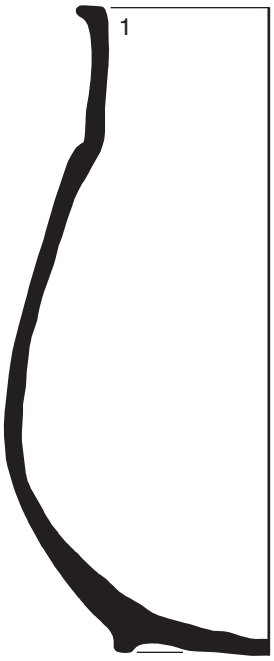
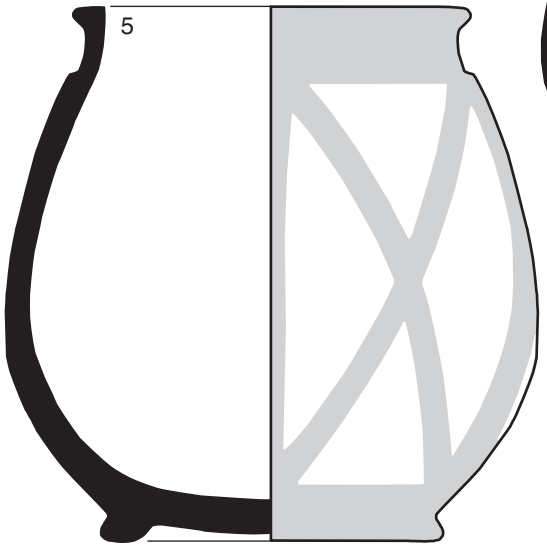
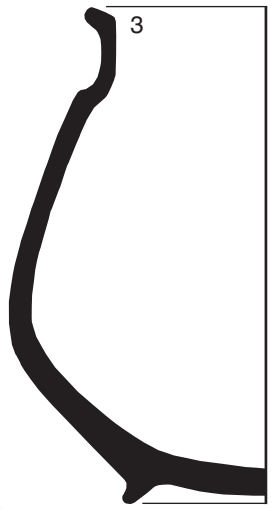
155 A 2

155 B 2



1



2



N. A. P.

N. A. P.

SOUTHERN ALLUVIAL PLAIN

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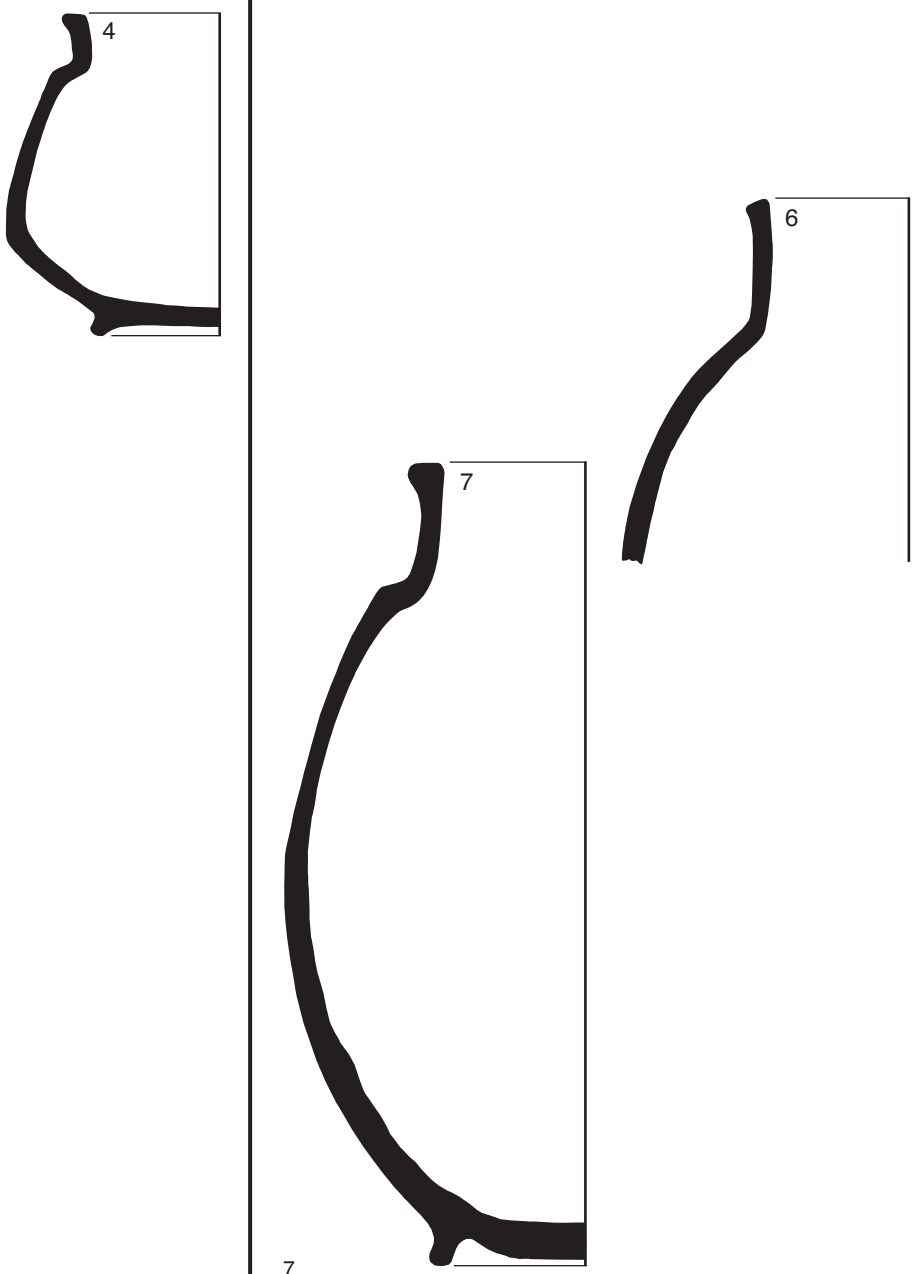
# PLATE 79




7

## 155 A 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | D | 101281 | A | Ic | 7.5YR 6/4 | ø rim : 100. *TD* 2, Pl. 21 : 6. |

## 155 B 2

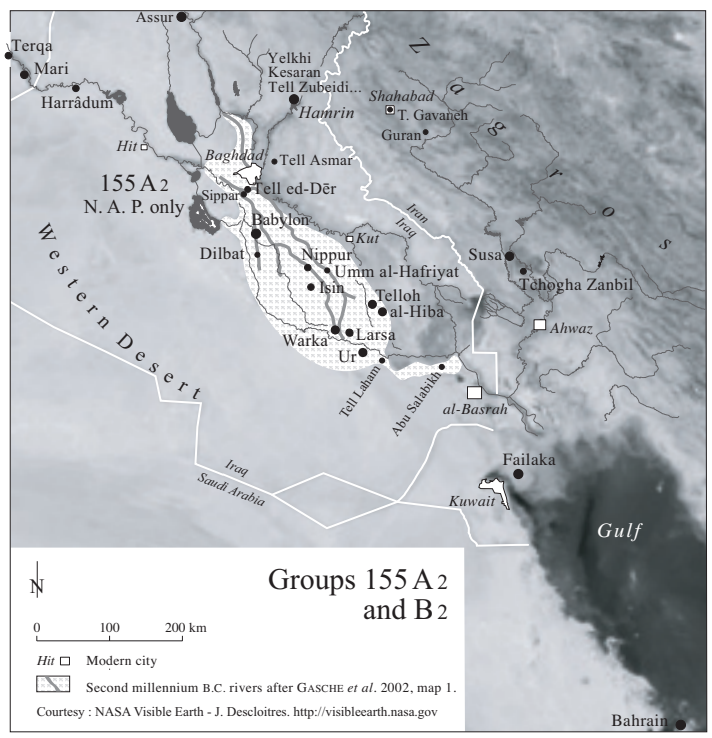
| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 2* | D | 101356 | A | Ie | 10YR 7/3 | ø rim : 88. *TD* 2, Pl. 21 : 7. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 3 | N | 3P 214 | TA | X | beige | ø rim : 95. *OIP* 78, Pl. 94 : 14. |
| 4 | N | A 2041 | WB | IV 6 | light buff | ø rim : 83. |
| 5 | W | 20796 | Sînkāšid | 5 | *grünlich-gelb* | ø rim : 142. VAN ESS 1988a, fig. 6 : 66. Geometric design on exterior in dark paint. |

## 160 A 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 6* | D | 100346 | A | Ic[1)] | 5Y 7/3 | ø rim : 86. *TD* 1, Pl. 19 : 3. |
| 7 | D | 102939 | A | Ie | 10YR 7/3 | ø rim : 101. Burial D.206 dug from Ie. |

1) See *TD* 2, 38 for the stratigraphical correction.

Continued on Pl. 80




10 cm

(Photos at various scales)

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—1600

160 A 2

160 B 2

1

2

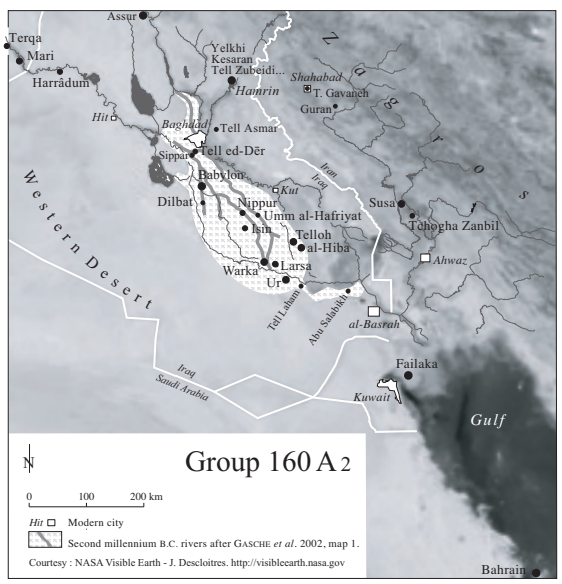
C.P.U.

3

4

5

—1700



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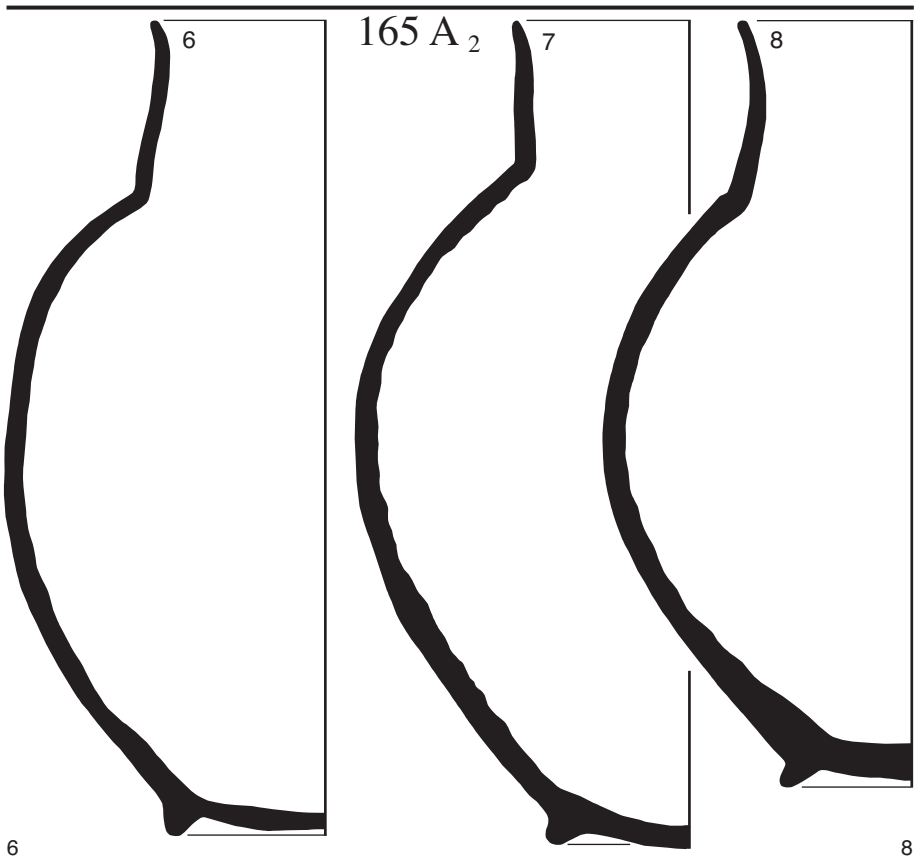
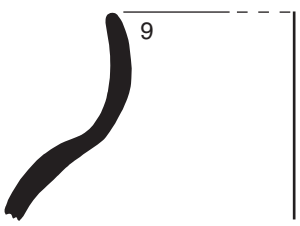
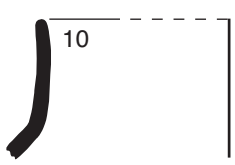
# PLATE 80






## 160 A 2

Continued from Pl. 79

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | N | 3P 217 | TA | X | - | ø rim : 122. *OIP* 78, Pl. 94 : 13. |
| 2 | W | 20116,1 | Sînkāšid | 3 | *gelb* | ø rim : 95. VAN ESS 1988a, fig. 15 : 115. Dark-painted neck with spots around shoulder. |

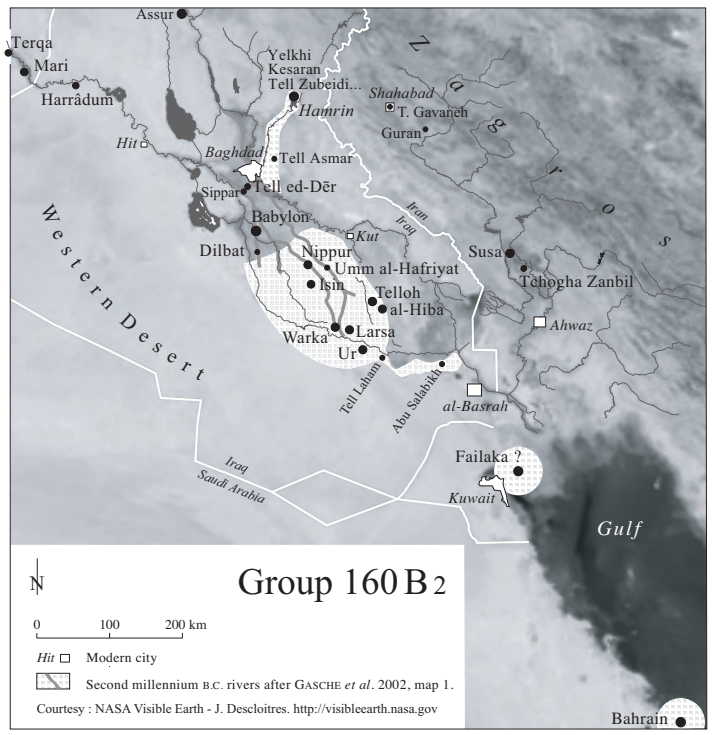
## 160 B 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 3 | W | 20793 | Sînkāšid | 5 | *gelb* | ø rim : 120. VAN ESS 1988a, fig. 19 : 134. |
| DIYALA | | | | | | |
| 4 | Yel | HY 608 | B | IVb | *verde* | ø rim : 100. GABUTTI 2002-03, Pl. 97 : 2. |
| 5 | Yel | y 264 | B | Va | *cuoio* | ø rim : 99. GABUTTI 2002-03, Pl. 96 : 8. |

## 165 A 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 6* | D | 101367 | A | Ia | 5YR 6/6 | ø rim : 88. Burial D.32 dug from Ia. |
| 7 | D | 101829 | A | Ia | 5YR 5/8 | ø rim : 91. Burial D.72 probably dug from Ia. |
| 8 | D | 100987 | A | Ia | 10YR 8/3 | ø rim : 92. Burial D.15B probably dug from Ia. |
| 9* | D | 101110 | A | Ic | 5Y 7/2 | ø rim : ± 100. Pit 3 dug from Ic. |
| 10* | D | 100528 | A | Ig | 5Y 7/2<br>S : 5Y 7/3 | ø rim : ± 100. |

Continued on Pl. 81




10 cm

(Photos at various scales)

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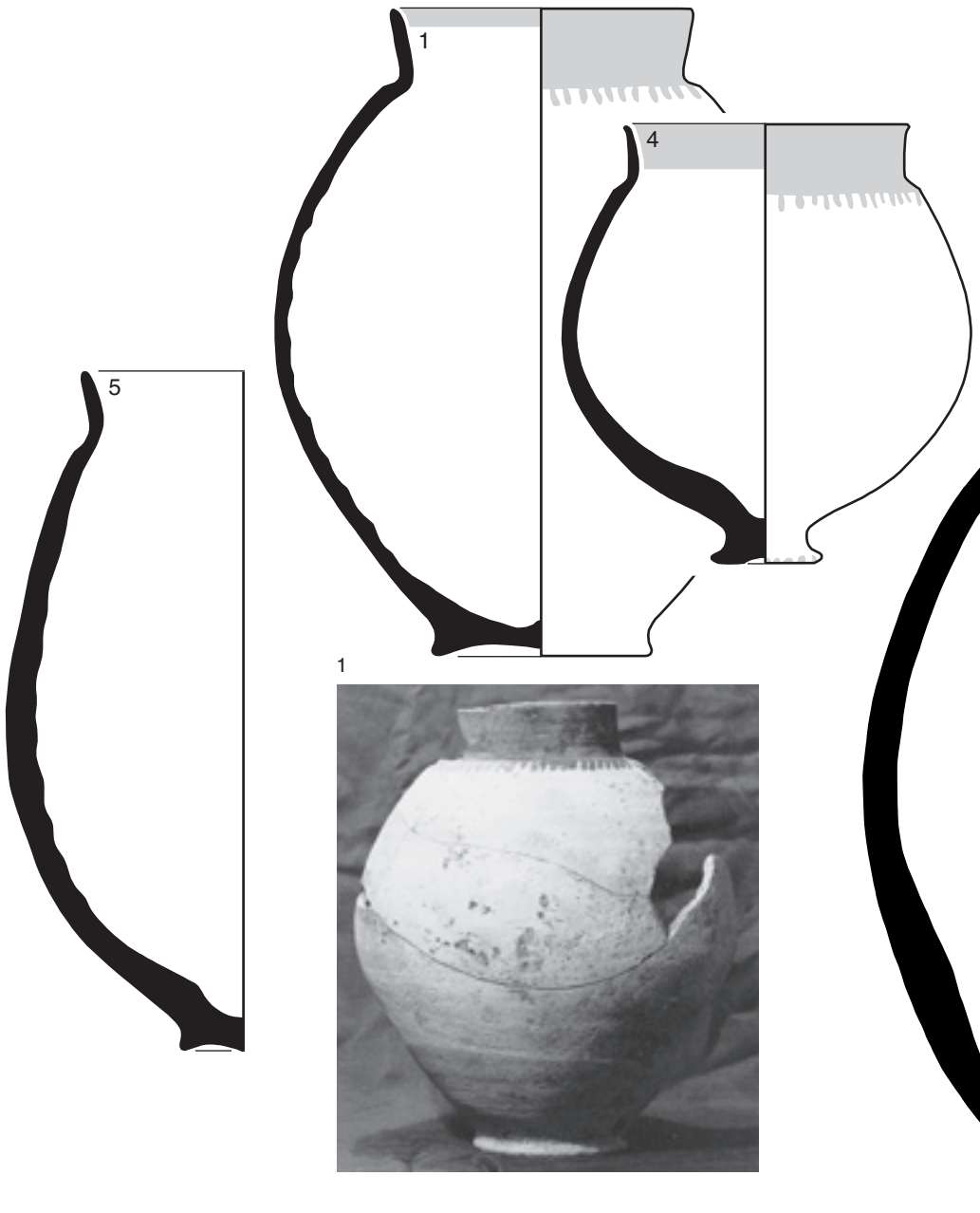
—1600

165 A 2




—1700

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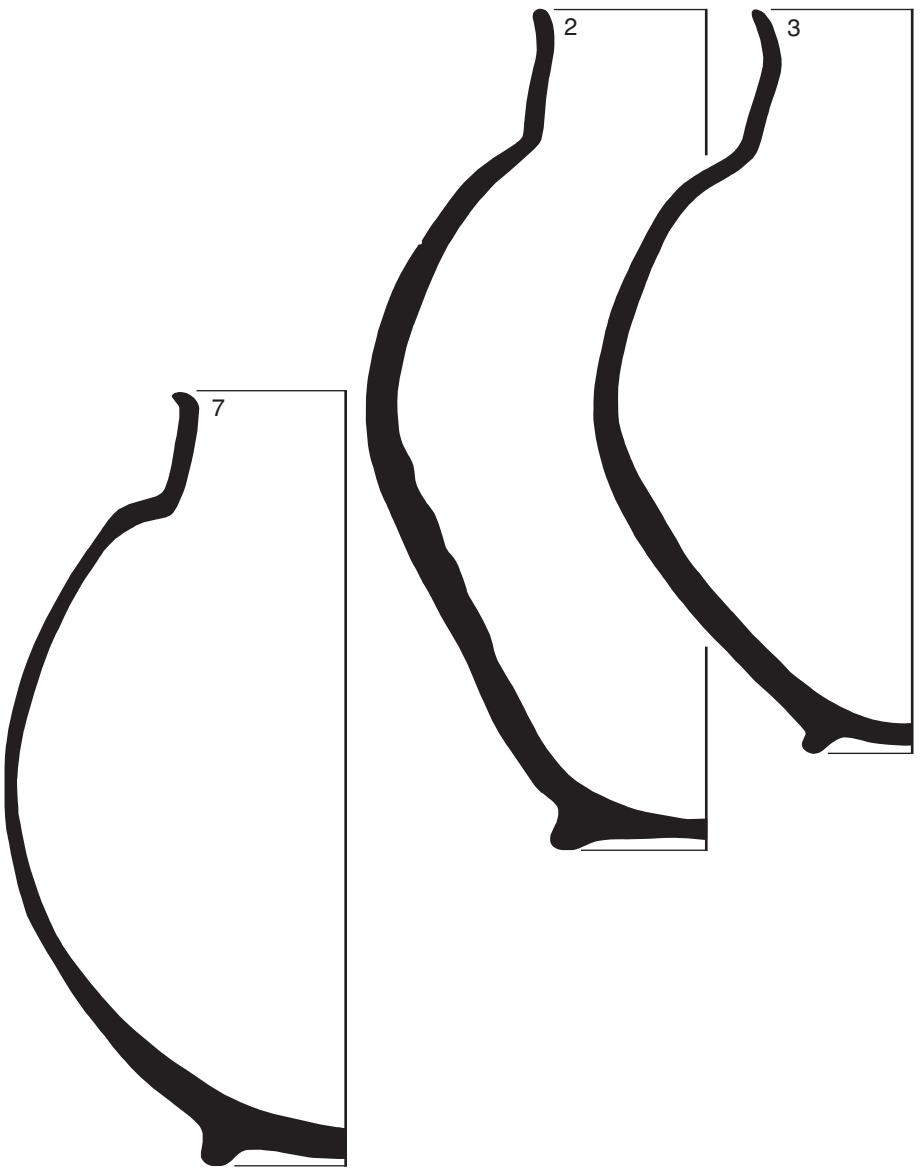


# PLATE 81

165 A 2

Continued from Pl. 80

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | N | 12 N 296 | WB | IV 4 | light buff | ø rim : 79. FRANKE 1978, fig. 60 : 3. Dark-painted neck with short strokes around shoulder. |
| 2 | I | IB 848c | *NA* II | 3 | - | ø rim : 92. Burial 61 probably dug from *Schicht* 3. *Isin* 2, 44, Pl. 34. |
| 3 | I | IB 850 | *NA* II | 3 | - | ø rim : 85. Burial 62 probably dug from *Schicht* 3. *Isin* 2, 44, Pl. 35. |
| 4 | N | 2N 927 | TB | E | brownish S : pinkish-buff | ø rim : 76. *OIP* 78, Pl. 94 : 8. Dark-painted rim and neck with short strokes around shoulder and dots around foot. |
| 5 | W | 20458 | Sînkāšid | 3 | *rot* S : *hellgelb* | ø rim : 92. VAN ESS 1988a, fig. 14 : 109. |
| 6 | W | 20029f | Sînkāšid | 0[1)] | - | ø rim : 99. Incised surface decoration not shown. Disturbed Burial 50, under Room 16 the palace. *AUWE* 10, Pl. 28 : f = VAN ESS 1988a, fig. 13 : 107. |
| 7 | H | 1 H 26A | B | - | - | ø rim : 93. |
| 8 | W | 20049a | Sînkāšid | 3 | - | ø rim : 84. VAN ESS 1988a, fig. 14 : 108. Dark-painted neck with short strokes around shoulder |

1) See Pl. 8, note 2).

C.P.U. = Chronological Position Uncertain

Continued on Pl. 82

10 cm

(Photos at various scales)

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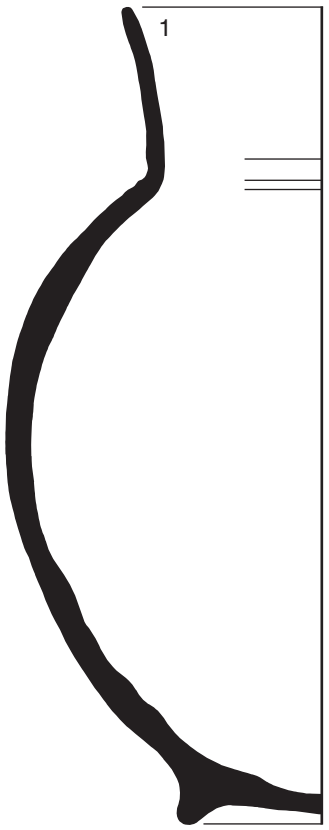
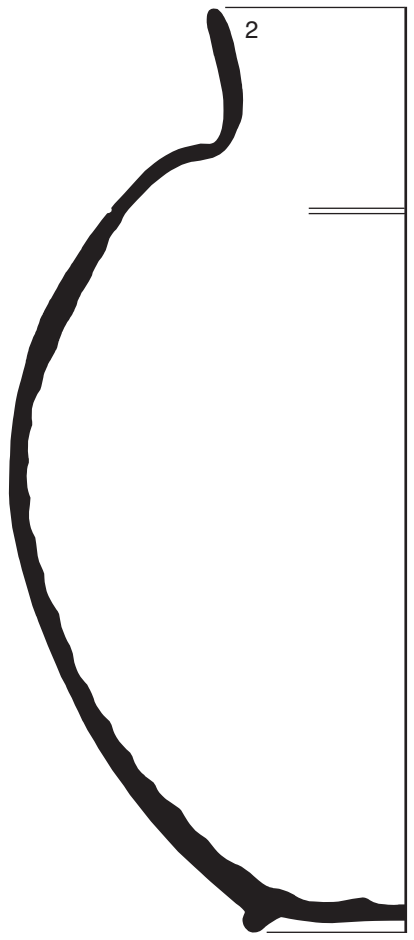
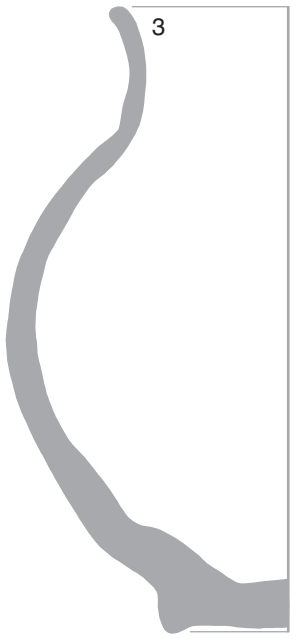
—1500

165 A 2

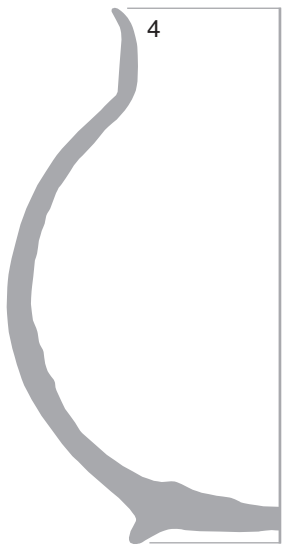



2



—1600



—1700

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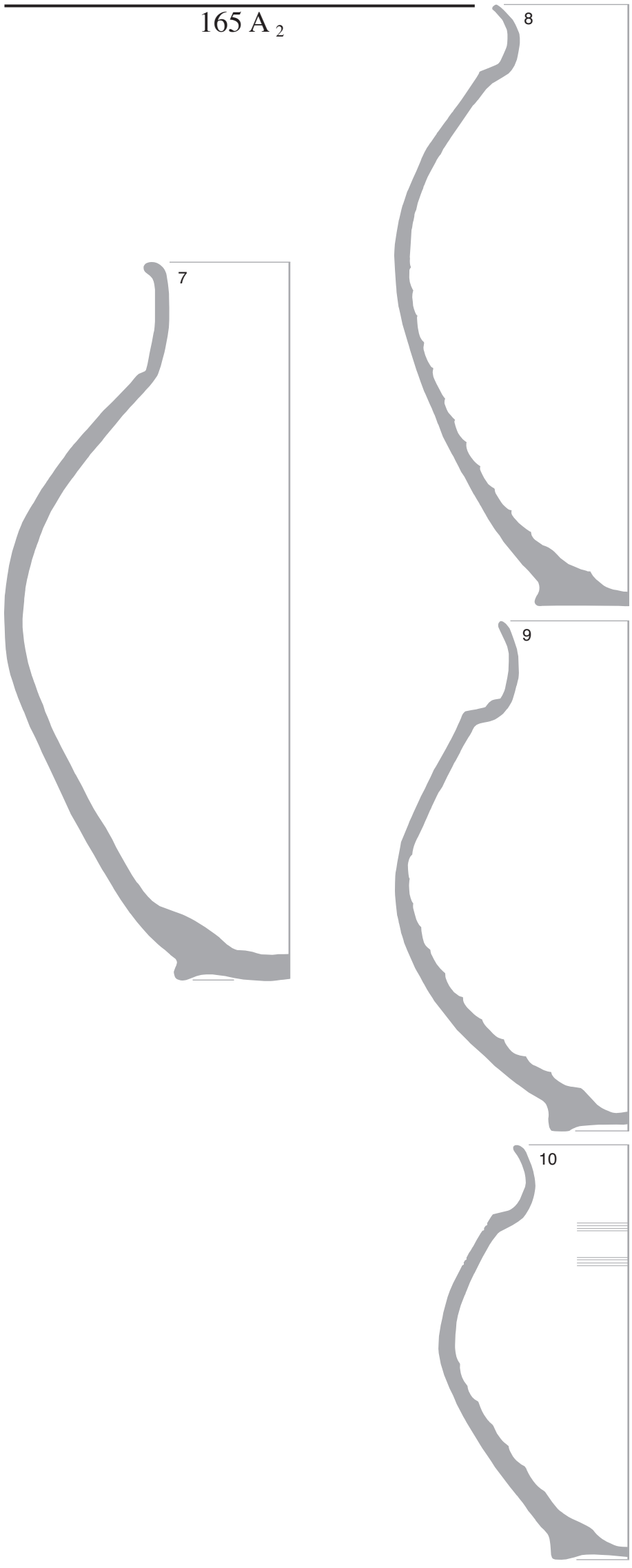
# PLATE 82

## 165 A 2

Continued from Pl. 81




| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 105804 | E | IIId | 10YR 7/3 | ø rim : 106. Burial D.325 dug from IIId. *MHEM* 1, Pls. 23 and 36 : 1, and *MHEM* 4, Pl. 2 : 7. |
| 2 | D | 104391 | E | IIId | 5YR 6/6 | ø rim : 102. Burial D.272 dug from IIId. *MHEM* 1, Pls. 21 and 36 : 3. |
| MIDDLE EUPHRATES | | | | | | |
| 3* | Din | V 142 | *Bât.* 3 | $3B_2$ | 7.5YR 8/2 | ø rim : 92. *Haradum* 1, fig. 94 : 10. *MHEM* 4, Pl. 2 : 2. Redrawn. |
| 4 | Din | V 502 | *Bât.* 1 | 3D | *rose* | ø rim : 90. *Haradum* 1, fig. 101 : 6. |
| DIYALA | | | | | | |
| 5 | Yel | HY 319 | B | IIIa | *giallo-verdastro* | ø rim : 90. GABUTTI 2002-03, Pl. 88 : 2. |
| 6 | Yel | HY 461/3 | B | Va | *verde* | ø rim : 90. Burial 203. GABUTTI 2002-03, Pl. 88 : 4. |
| GULF | | | | | | |
| 7 | Fai | - | - | - | - | ø rim : 107. HØJLUND 1987, fig. 265. Period 3A, see p. 109. |
| SUSIANA | | | | | | |
| 8 | S | GS-5530 | A | XIII | *jaunâtre* | ø rim : 104. *MDP* 47, Pls. 22 : 18 and 61 : 13. |
| 9 | S | GS-6152 | A | XIV | *brune* | ø rim : 104. *MDP* 47, Pl. 23 : 36. |
| 10 | S | GS-5975 | A | XV | *brune* | ø rim : 90. *MDP* 47, Pls. 24 : 18 and 64 : 13. |

Continued on Pl. 83

10 cm

(Photos at various scales)

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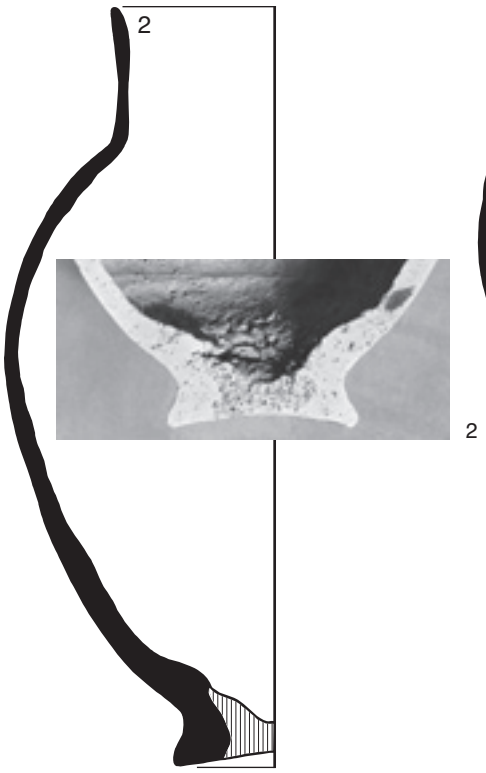
165 A 2



165 A 2

—1400

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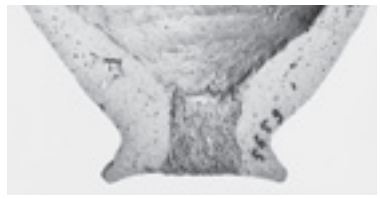
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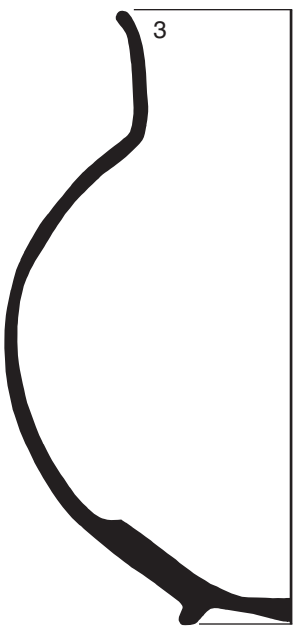
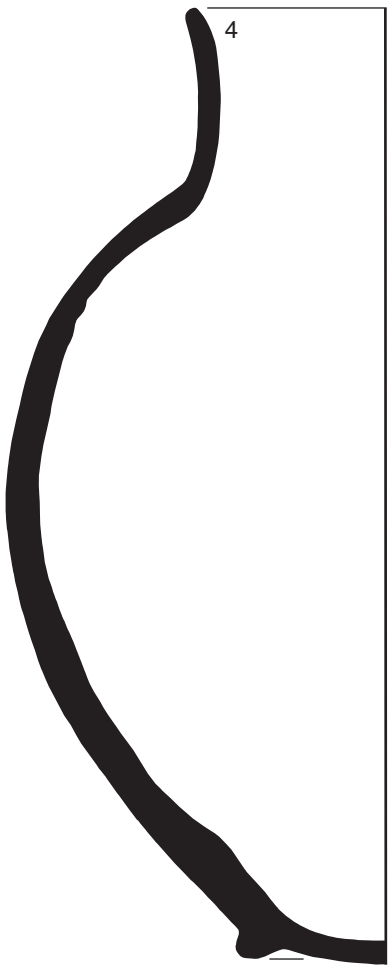
3

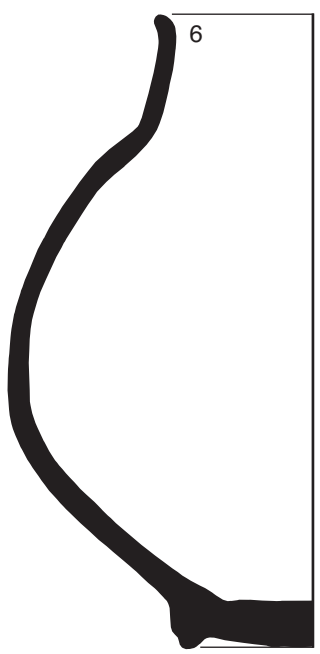
5

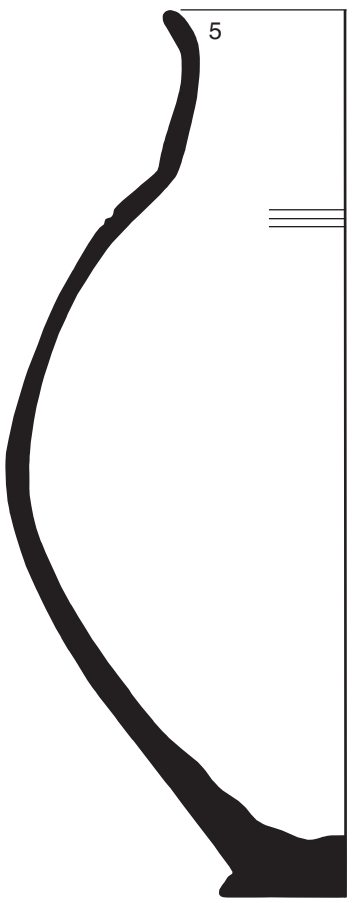
—1500

6



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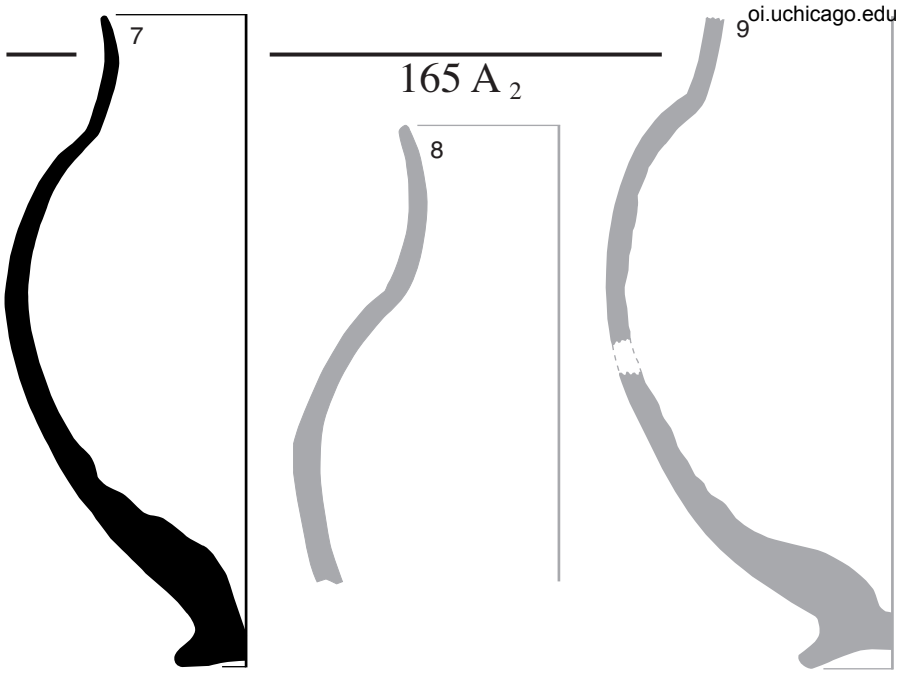
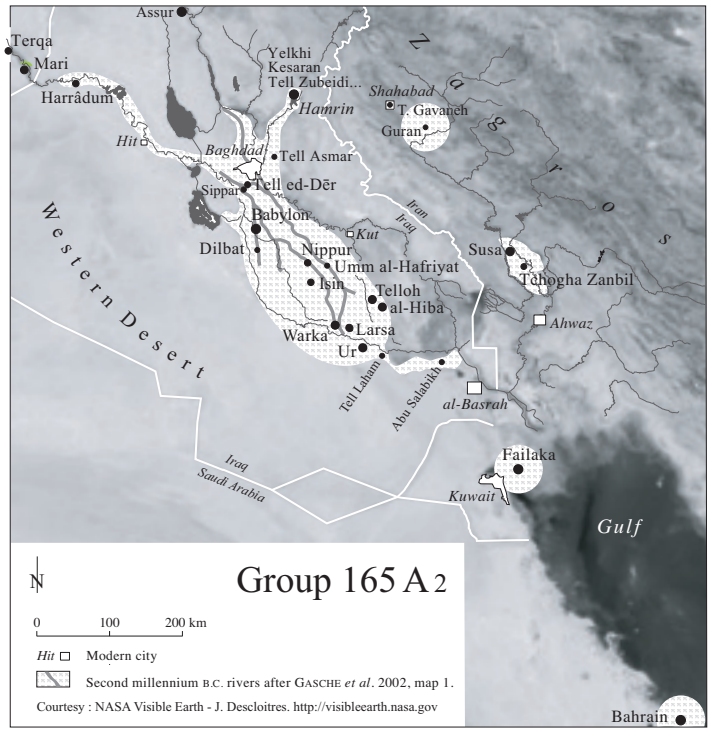



# PLATE 83

## 165 A 2

Continued from Pl. 82

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 105659 | E 3 | Ic 1 | 5Y 8/4 | ø rim : 82. Filled-in base. Burial D.374B dug from Ic, probably Sub-Phase 1. *NAPR* 6, Pl. 14 : 2, and *MHEM* 4, Pl. 2 : 5. |
| 2* | D | 107959 | F | 0 | 10YR 8/3 | ø rim : 85. Filled-in base. Burial D.392 dug from Ensemble 0. *NAPR* 3, Pl. 5 : 4, *NAPR* 6, Pl. 14 : 1, and *MHEM* 4, Pl. 2 : 6. |
| 3* | D | 103977 | E | IIIb | 5YR 8/4 | ø rim : 90. Burial D.242 probably dug from IIIb. *MHEM* 1, Pls. 24 and 36 : 8. |
| 4* | D | 109583 | F | 0 | 10YR 8/3 | ø rim : 104. Burial D.398 dug from Ensemble 0. *MHEM* 4, Pl. 2 : 8 (read 0, not Ib). |
| 5 | Dey | A 94.1 | B | III | 5Y 8/2<br>S : 5Y 8/3 | ø rim : 96. Burial 10 dug from III. ARMSTRONG 2001, figs. 5 and 10 : d. |
| 6 | Dey | 1 D 52 | B | III | 2.5Y 8/2<br>S : 5Y 8/2.5 | ø rim : 85. Burial 15 dug from III. ARMSTRONG 2001, figs. 6 and 10 : c. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 7 | N | 3P 127 | TA | VIII | tan<br>S : buff | ø rim : 75. *OIP* 78, Pl. 98 : 2. *MHEM* 4, Pl. 2 : 12. |
| DIYALA | | | | | | |
| 8 | Yel | y 37 | A | Ic | *giallo-verdastro* | ø rim : 84. VALTZ 2002-03, Pl. 152 : 5. |
| GULF | | | | | | |
| 9 | Bah | - | Exc. 519 Bldg. I | between 5.00 & 6.00 | - | ø rim : -. HØJLUND and ANDERSEN 1997, fig. 190. Period IIIb 1. |




10 cm

(Photos at various scales)

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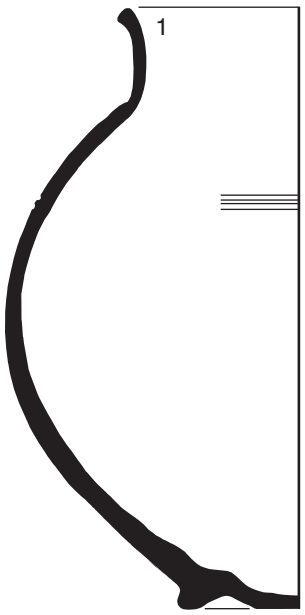
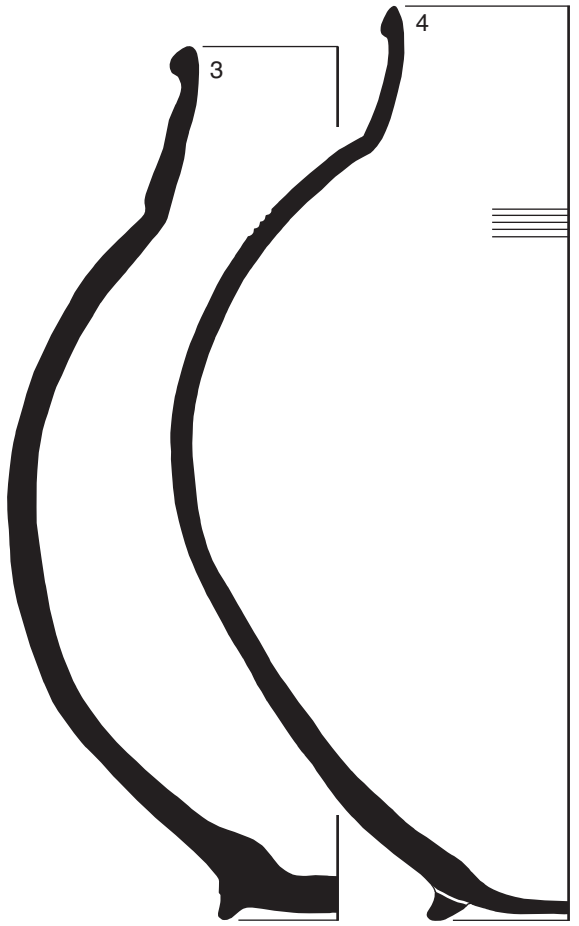
—1500

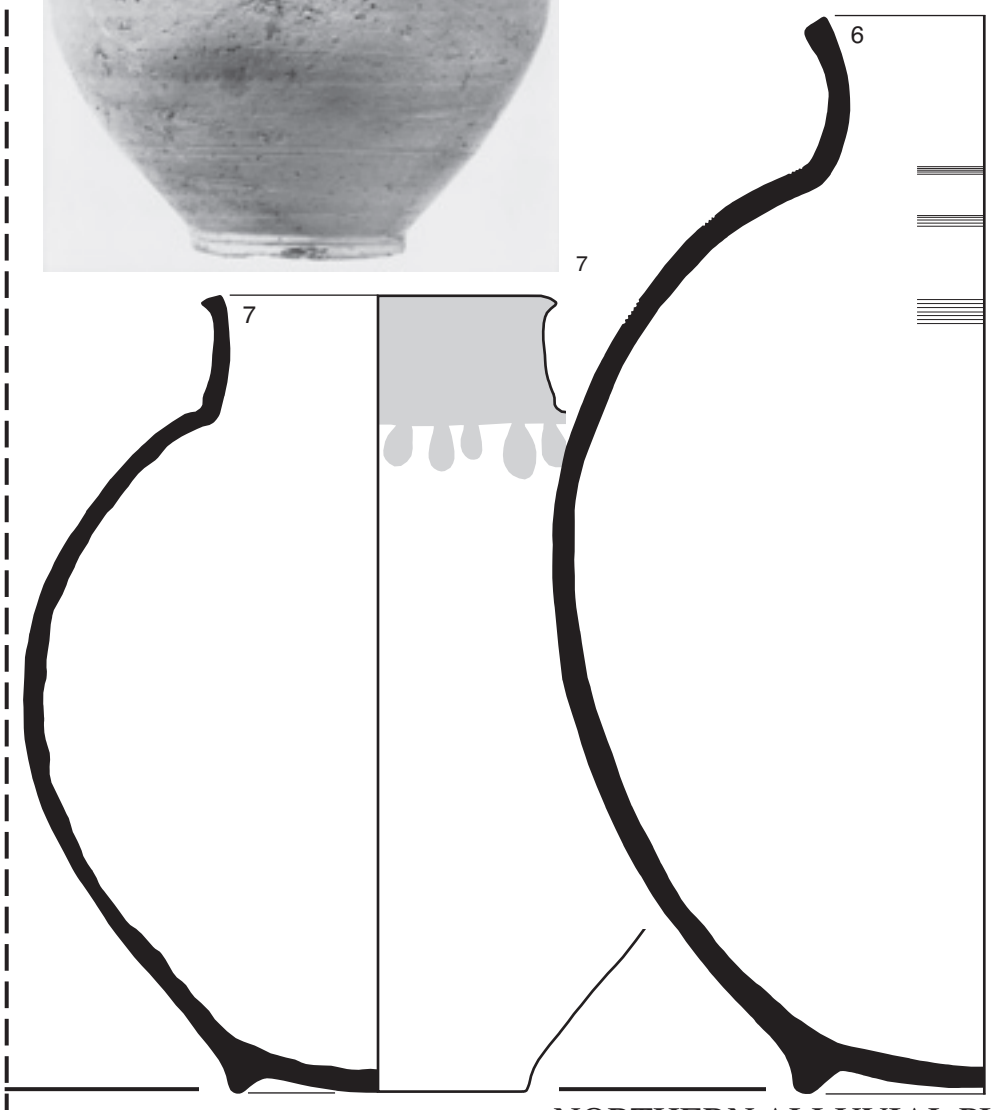
# 165 B 2



2



—1600



6

NORTHERN ALLUVIAL PLAIN

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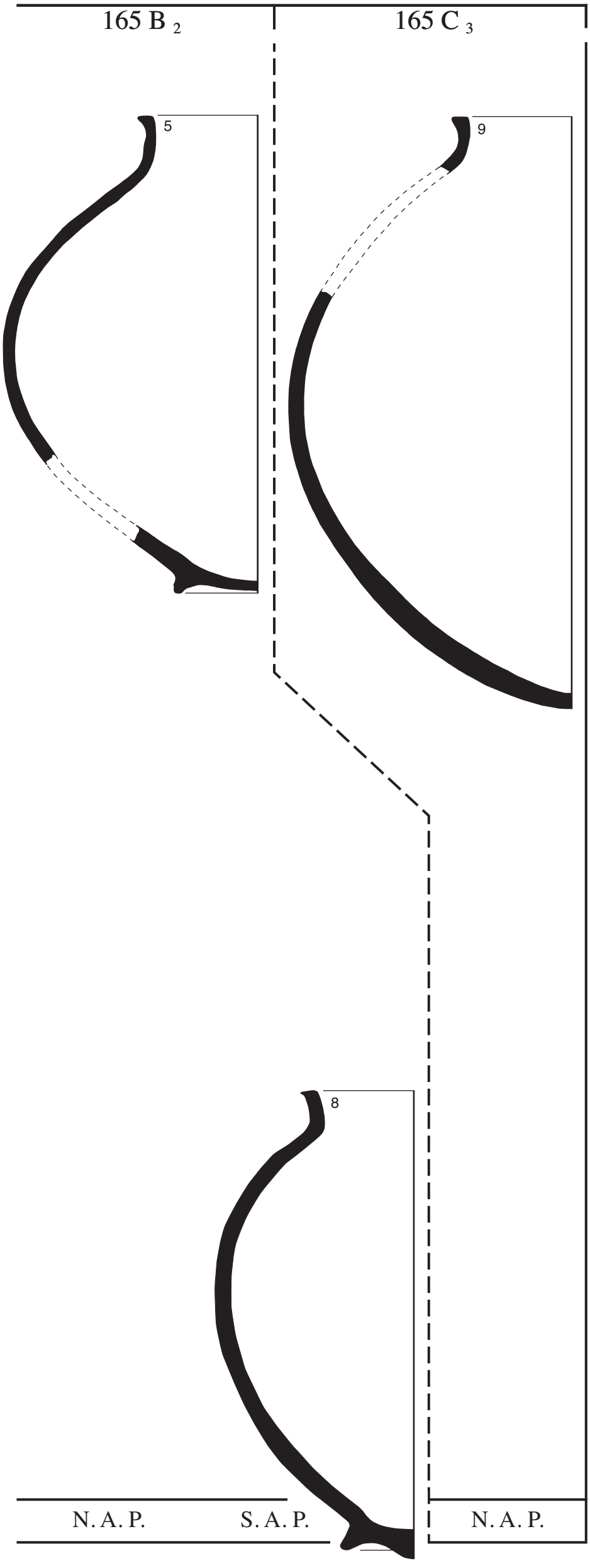
# PLATE 84

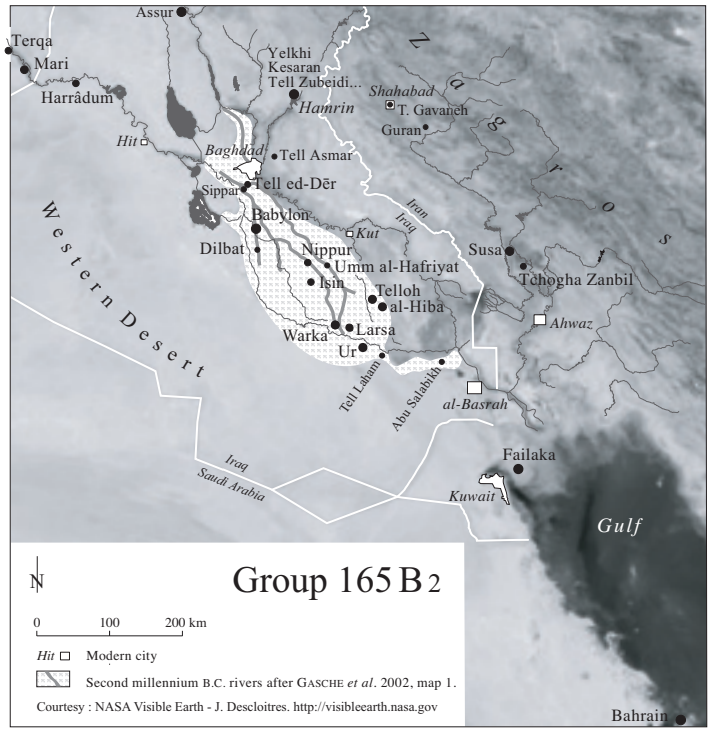



## 165 B 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 103941 | E | IIId | 10YR 7/3 | ø rim : 94. Burial D.246 dug from IIId. *MHEM* 1, Pls. 15 and 36 : 6. |
| 2* | D | 103204 | E *sud* | 0 | 10YR 7/3 | ø rim : 100. Burial D.201 dug from Ensemble 0. |
| 3 | Dey | 1 D 22 | B | III | 7.5YR 7/4<br>S : 5Y 8/3 | ø rim : 90. Burial 8 dug from III. ARMSTRONG 2001, figs. 6 and 10 : e. |
| 4 | D | 105709 | E | IIId | 7.5YR 7/4 | ø rim : 100. Burial D.320 dug from IIId. *MHEM* 1, Pls. 22 and 36 : 4. |
| 5* | D | 104034 | E | IIIb | 2.5Y 7/2 | ø rim : 100. *MHEM* 1, Pl. 36 : 12. |
| 6 | D | 101371 | A | Ia | 5YR 7/6 | ø rim : 97. Burial D.33 dug from Ia. *TD* 2, Pl. 14 : 2. |
| 7 | D | 101644 | A | Ia | 2.5Y 8/4 | ø rim : 93. Burial D.51 dug from Ia. Dark-painted neck with short strokes around shoulder. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 8 | L | 76.77 | E.BABBAR | B | *beige clair* | ø rim : 97. ARNAUD *et al.* 1979, 5-6, figs. 6 and 60. |

## 165 C 3

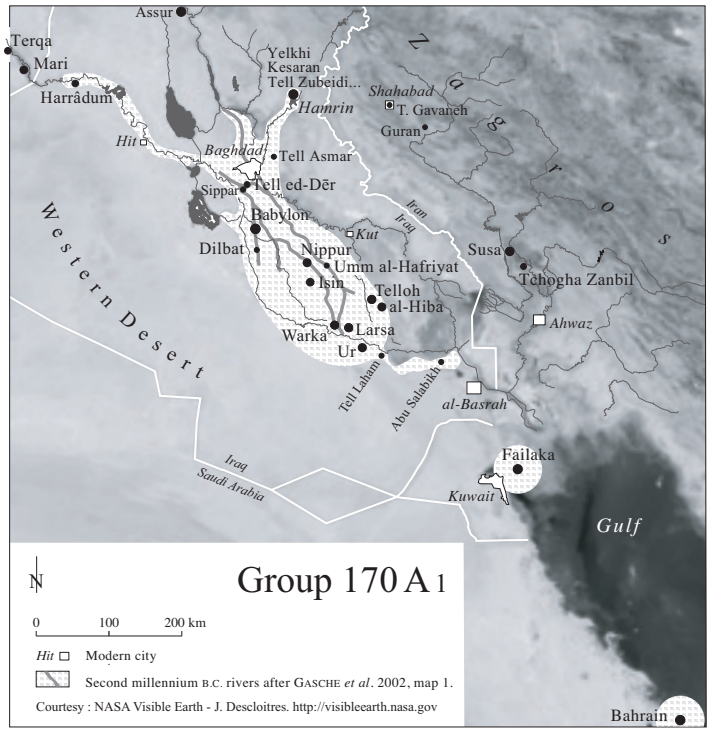
| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 9* | D | 103967 | E | IIIb | 10YR 6/1 | ø rim : 100. *MHEM* 1, Pl. 36 : 13. |

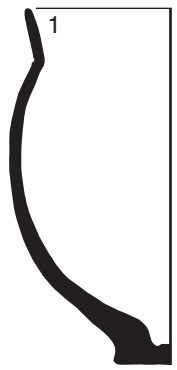



10 cm

(Photos at various scales)

# 170 A 1


Assur
Terqa
Mari
Harrâdum
Yelkhi
Kesaran
Tell Zubeidi...
Hamrin
Shahabad
T. Gavaneh
Guran
Hit
Baghdad
Tell Asmar
Sippar
Tell ed-Dēr
Babylon
Kut
Iran
Iraq
Dilbat
Nippur
Umm al-Hafriyat
Isin
Telloh
al-Hiba
Susa
Tchogha Zanbil
Ahwaz
Warka
Larsa
Ur
Tell Lahm
Abu Salabikh
al-Basrah
Failaka
Kuwait
Iraq
Saudi Arabia
Gulf
Bahrain
Western Desert
Zagros
N
Group 170 A 1
0
100
200 km
Hit Modern city
Second millennium B.C. rivers after GASCHE et al. 2002, map 1.
Courtesy : NASA Visible Earth - J. Descloitres. http://visibleearth.nasa.gov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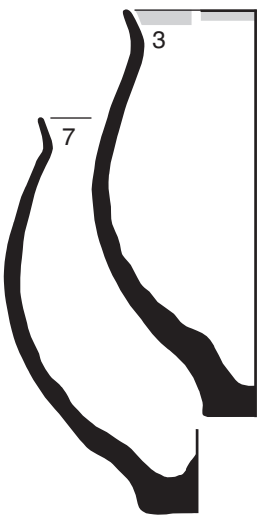
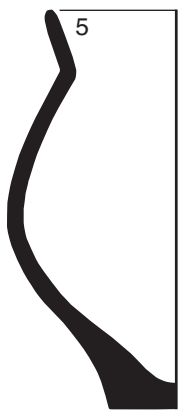

3
7

4
6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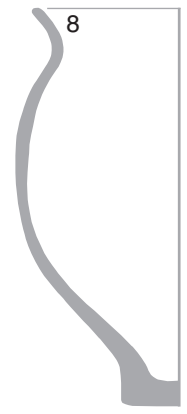
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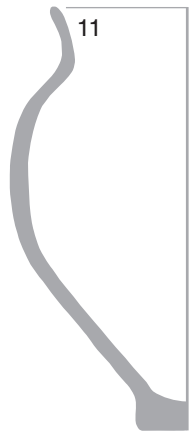
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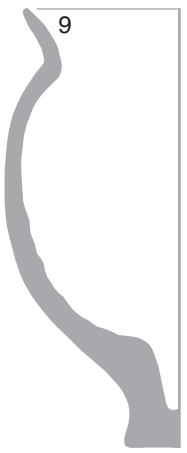
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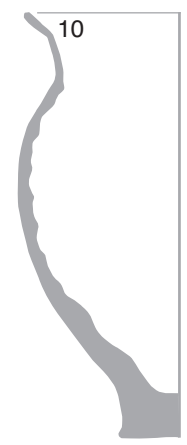
12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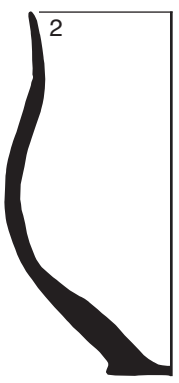
2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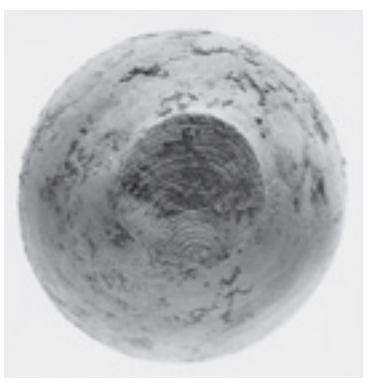

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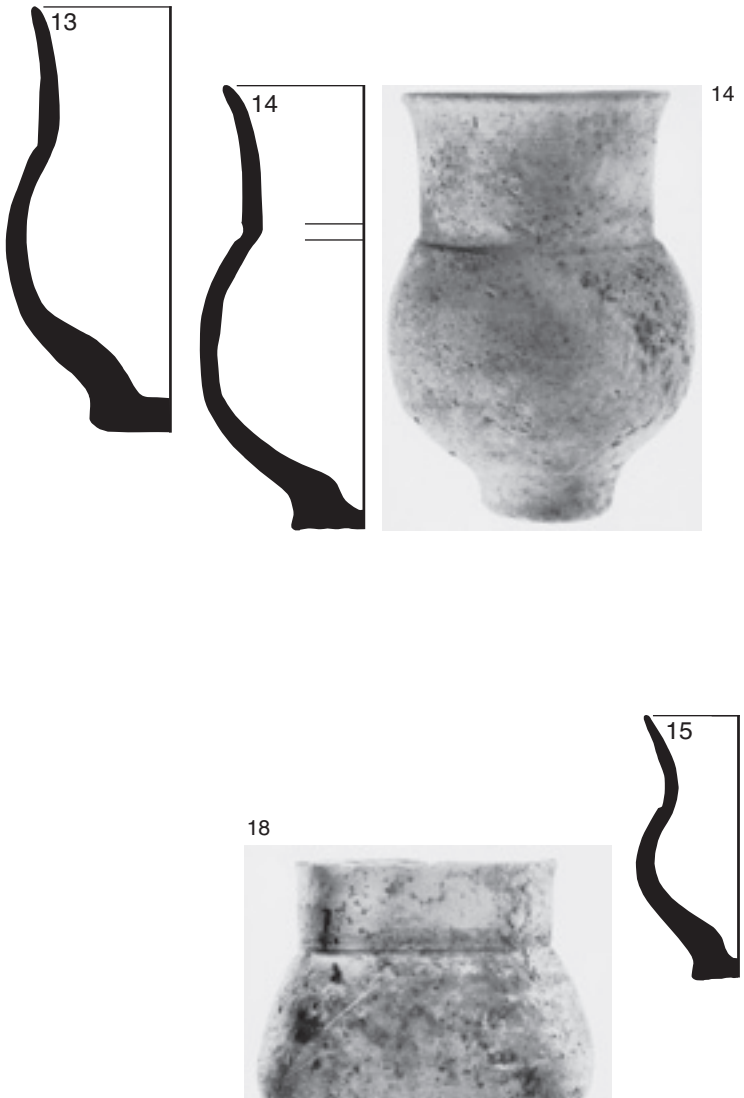
# PLATE 85

## 170 B 1




NORTHERN ALLUVIAL PLAIN — DIYALA

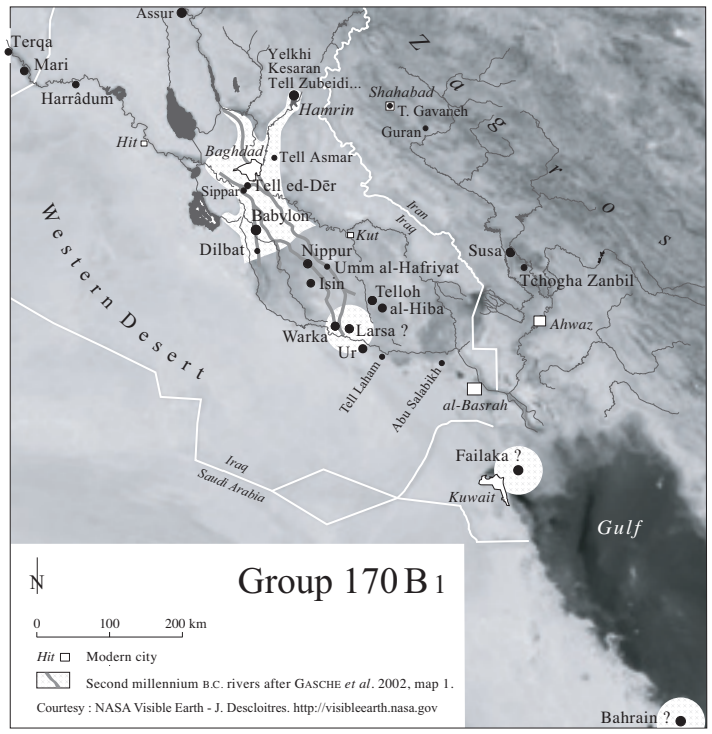
## 170 A 1

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 100260 | A | Ia | 7.5YR 6/4 | ø rim : 73. *TD* 1, Pl. 19 : 2. |
| 2* | D | 101834 | A | Ig | 7.5YR 6/4 | ø rim : 74. *TD* 2, Pl. 21 : 2. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 3 | N | 2N 928 | TB | D | reddish<br>S : buff to pinkish | ø rim : 69. *OIP* 78, Pl. 94 : 6.<br>Dark-painted band over rim. |
| 4 | N | A 2013 | WB | IV 6 | pink<br>S : cream | ø rim : 83. |
| 5 | I | IB 1463 | *NOA* III | 6,75m | 7.5 YR 8/6<br>S : 2.5 Y 8/2 | ø rim : 69. |
| 6 | N | 3P 372 | TA | X | *beige* | ø rim : 50. *OIP* 78, Pl. 94 : 9.<br>Band over rim in black-brown paint. |
| 7 | N | B 996 | WB | IV 3 | buff<br>S : cream | ø rim : 85. |
| MIDDLE EUPHRATES | | | | | | |
| 8 | Din | V 87 | *Bât*. 3 | $3B_1$ | *beige* | ø rim : 76. *Haradum* 1, fig. 97 : 19. |
| 9 | Din | V 478 | *Bât*. 5 | 3C | *beige rosé* | ø rim : 87. *Haradum* 1, fig. 97 : 3. |
| 10 | Din | V 414 | *Bât*. 35 | 3D | *beige* | ø rim : 80. *Haradum* 1, fig. 97 : 1. |
| DIYALA | | | | | | |
| 11 | Yel | HY 87 | B | IIIa | *giallo-verdastro* | ø rim : 71. GABUTTI 2002-03, Pl. 67 : 7. |
| 12 | Yel | HY 317 | B | IVb | *giallo-verdastro* | ø rim : 76. GABUTTI 2002-03, Pl. 69 : 4. |

## 170 B 1

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 13* | D | 103937 | E | IIIb | 10YR 5/2 | ø rim : 70. *MHEM* 1, Pl. 35 : 1. |
| 14 | D | 105788 | E | IIId | 7.5YR 7/4 | ø rim : 72. Burial D.322 dug from IIId. *MHEM* 1, Pls. 22 and 35 : 2. |
| 15* | D | 100268 | A | 0 | 7.5YR 6/4<br>S : 10YR 8/2 | ø rim : 48. |
| 16* | D | 101700 | A | Ia-c | 2.5YR 6/6 | ø rim : 75. |
| 17* | D | 101279 | A | Ic | 10YR 7/3 | ø rim : 73. *MHEM* 4, Pl. 3 : 9. |
| 18* | D | 100349 | A | Ic[1)] | 7.5YR 6/4 | ø rim : 72. *TD* 1, Pl. 19 : 1. |
| DIYALA | | | | | | |
| 19 | Yel | HY 458 | B | Vb | *cuoio* | ø rim : 74. GABUTTI 2002-03, Pl. 69 : 13. |

1) See *TD* 2, 38 for the stratigraphical correction.




10 cm

(Photos at various scales)

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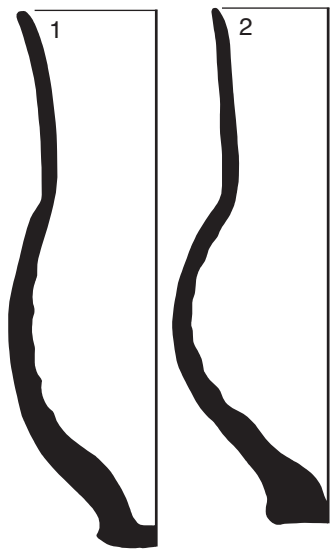
—1500

## 170 C 1



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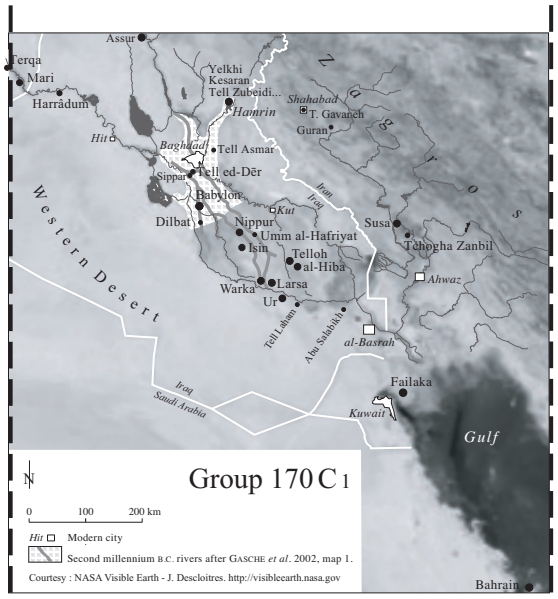
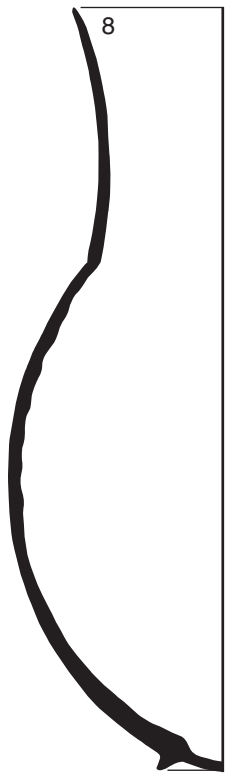
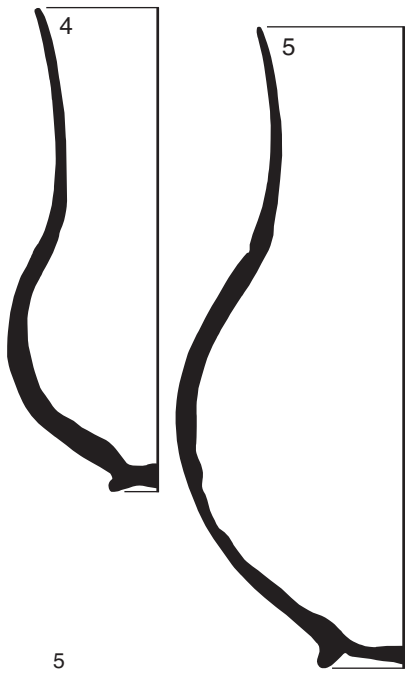



## 170 D 2

8

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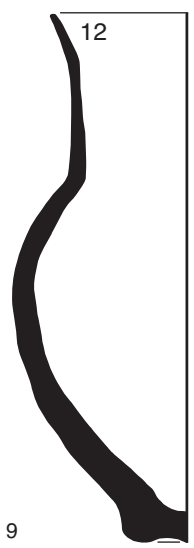
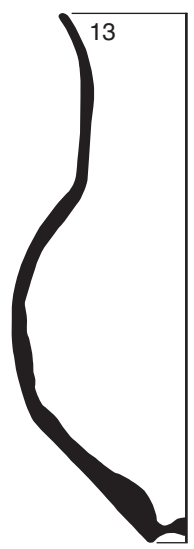
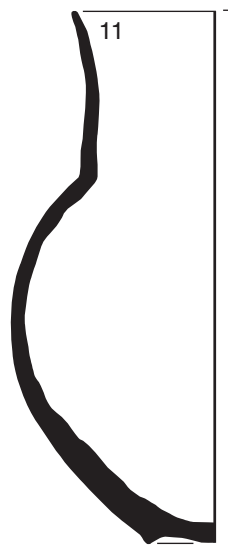
9




—1600




N. A. P. DIYALA

NORTHERN ALLUVIAL PLAIN

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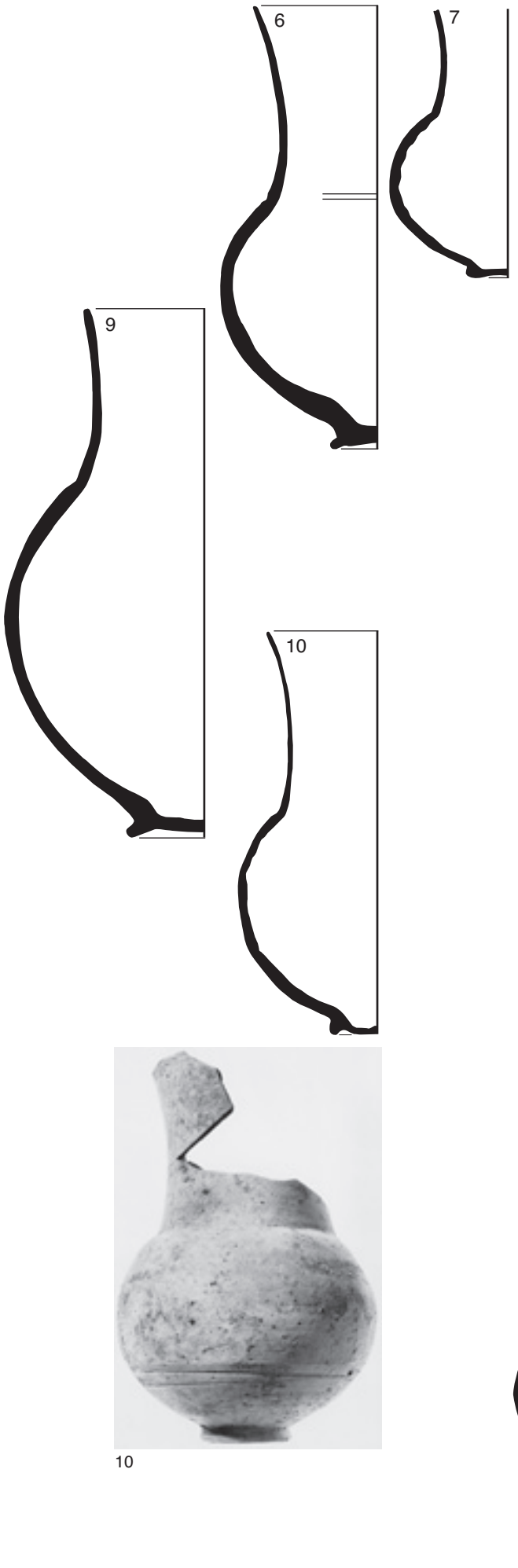
# PLATE 86

## 170 D 2






10

N. A. P. S. A. P.

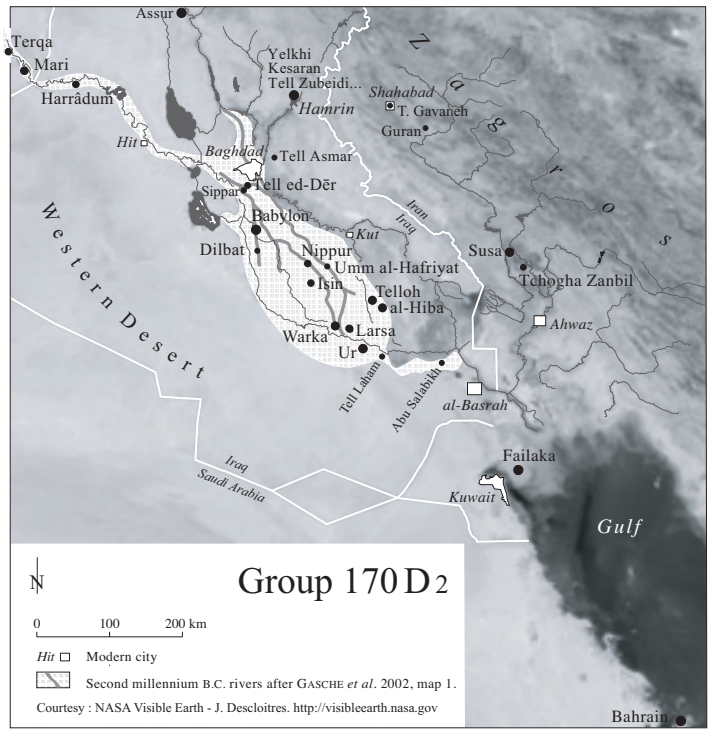
## 170 C 1

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 103840 | E | IIIb | 5YR 6/6 | ø rim : 70. Burial D.251 dug from IIIb. *MHEM* 1, Pls. 24 and 35 : 5. |
| 2* | D | 103297 | E | IIId | 10YR 6/3 | ø rim : 60. *MHEM* 1, Pl. 35 : 6 and *MHEM* 4, Pl. 3 : 5. |
| DIYALA | | | | | | |
| 3 | Yel | HY 196/1 | B | IIIa[1)] | *cuoio* | ø rim : 64. Burial 15. GABUTTI 2002-03, Pl. 71 : 3. |

## 170 D 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 4* | D | 103987 | E | IIIa | 5YR 6/4 | ø rim : 64. *MHEM* 1, Pl. 35 : 16. |
| 5* | D | 103880 | E | IIId | 5YR 7/3 | ø rim : 76. *MHEM* 1, Pl. 35 : 12. |
| 6 | D | 103474 | E | IIId | 10YR 7/4 | ø rim : 80. Burial D.218 probably dug from IIId. *MHEM* 1, Pls. 23 and 35 : 17, and *MHEM* 4, Pl. 3 : 6. |
| 7* | D | 105776 | E | IIId | 5YR 7/6 | ø rim : 78. *MHEM* 1, Pl. 35 : 15. |
| 8 | D | 103364 | E *sud* | 0 | 2.5YR 8/4 | ø rim : 78. Burial D.203 dug from Ensemble 0. |
| 9* | D | 103263 | E *sud* | 0 | 7.5YR 6/4 | ø rim : 80. Burial D.202 dug from Ensemble 0. |
| 10* | D | 107902 | F | Ib | 7.5YR 7/4 | ø rim : 73. *NAPR* 3, Pl. 7 : 1 and *MHEM* 4, Pl. 3 : 7. |
| 11* | D | 101396 | A | Ia | 7.5YR 6/4 | ø rim : 75. Burial D.32 dug from Ia. *MHEM* 4, Pl. 3 : 8. |
| 12* | D | 101432 | A | Ic | 2.5YR 7/4 | ø rim : 70. Pit 2 dug from Ic. |
| 13* | D | 101273 | A | Ic | 7.5YR 6/4 | ø rim : 66. *TD* 2, Pl. 21 : 1 and *MHEM* 4, Pl. 3 : 10. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 14 | N | 12 N 631 | WB | IV 6 | pink S : cream | ø rim : -. FRANKE 1978, fig. 70 : 3. |

1) GABUTTI 2002-03 assigns Burial 15 to both Level IIIa (Pl. 71 : 3) and Level IIIa-b (Pl. 29 : 13).




10 cm

(Photos at various scales)

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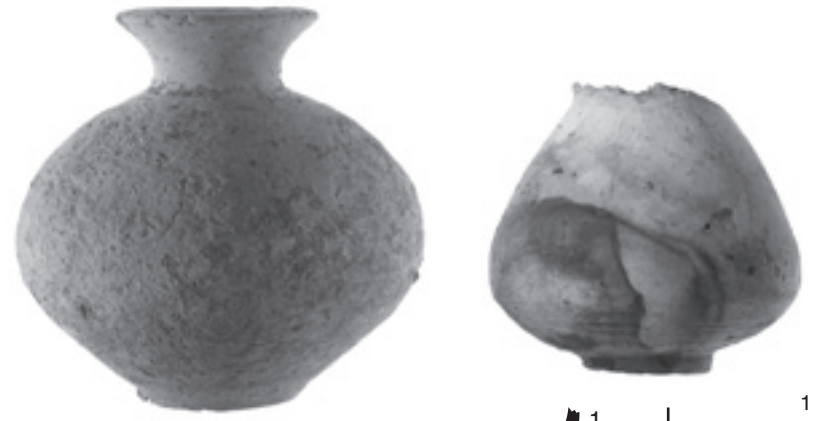
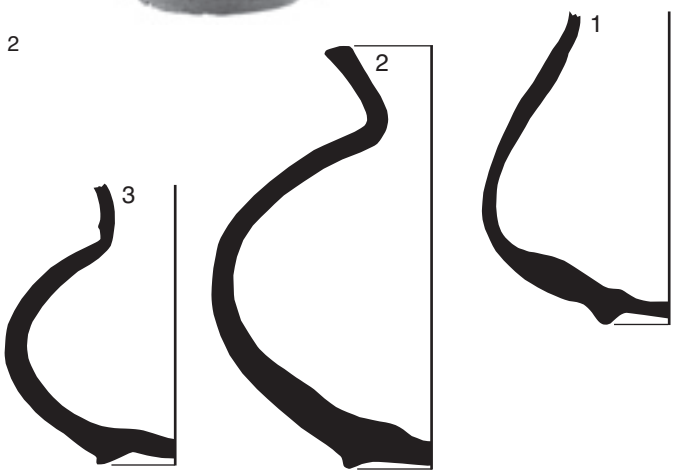


1



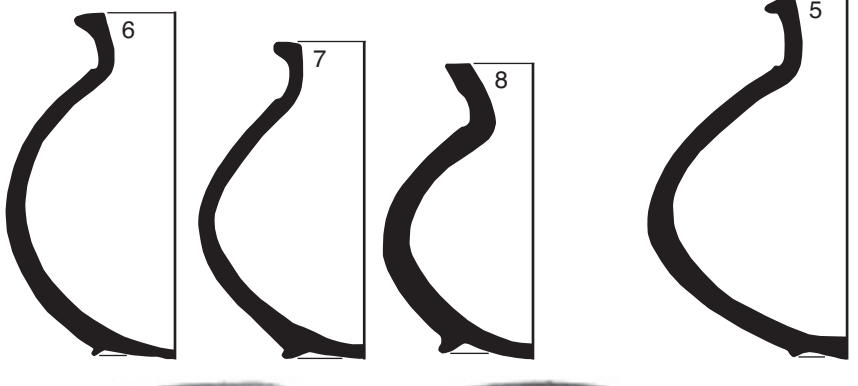

2

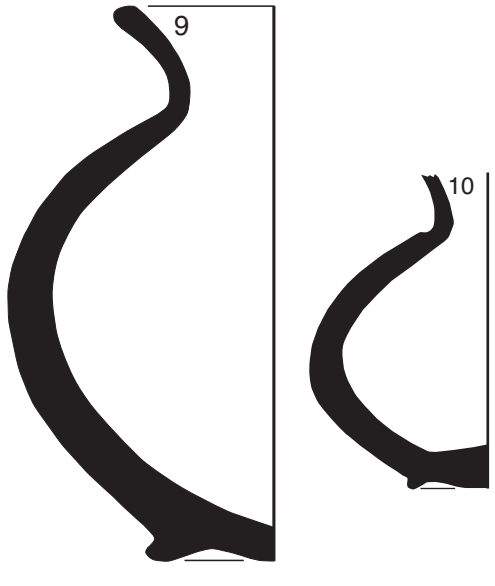
—1500

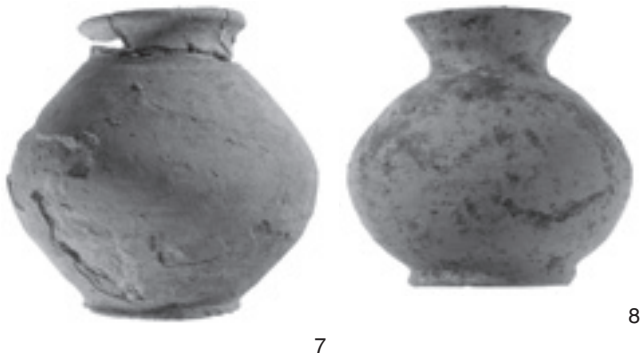
6

5

—1600



7

8

—1700

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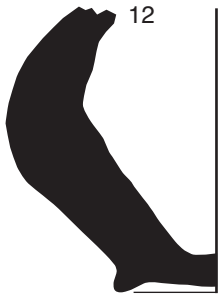
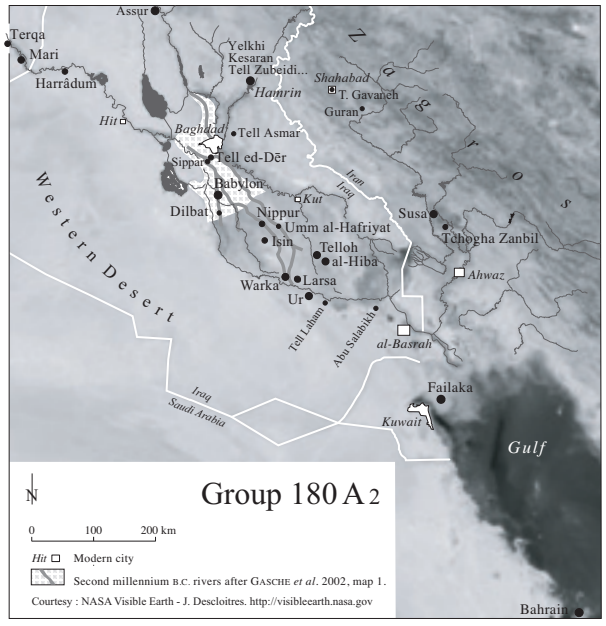
## 180 A 2

12



11

13

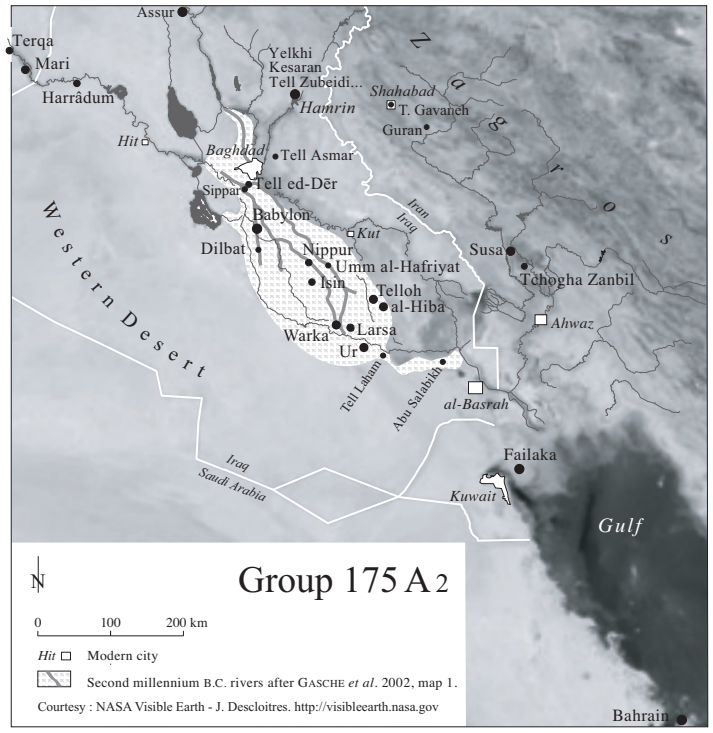



## 175 A 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 103970 | E | IIIb | 10YR 6/2 | ø rim : -. *MHEM* 1, Pl. 37 : 3. |
| 2* | D | 105816 | E | IIId | 10YR 8/3 | ø rim : 58. Burial 327 probably dug from IIId. *MHEM* 1, Pls. 15 and 37 : 5. |
| 3* | D | 103475 | E | IIId | 2.5Y 7/4 | ø rim : -. Burial 218 probably dug from IIId. *MHEM* 1, Pls. 23 and 37 : 4. |
| 4 | D | 101163 | A | 0 | 7.5YR 6/4 | ø rim : 27. |
| 5 | D | 101224 | A | Ic | 7.5YR 6/4 | ø rim : 45. *TD* 2, Pl. 22 : 6. SALLABERGER 1996, Pl. 5 : 3. |
| 6 | D | 101225 | A | Ic | 7.5YR 6/4 | ø rim : 53. |
| 7 | D | 101262 | A | Ic | 7.5YR 6/4 | ø rim : 48. *TD* 2, Pl. 22 : 4. |
| 8 | D | 101221 | A | Ic | 7.5YR 6/4 | ø rim : 46. *TD* 2, Pl. 22 : 5. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 9 | N | 3P 160 | TA | X 3 | tan<br>S : buff | ø rim : 72. Vertical burnish. *OIP* 78, Pl. 95 : 1. |
| 10 | W | 19822 | Sînkāšid | 6 | - | ø rim : -. VAN ESS 1988a, fig. 22 : 145. |

## 180 A 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 11* | D | 103965 | E | IIIb | 7.5YR 6/4 | ø rim : 24. *MHEM* 1, Pl. 37 : 1. |
| 12* | D | 104043 | E | IIId | 7.5YR 6/4 | ø rim : -. Burial 261 probably dug from IIId. *MHEM* 1, 49, Pls. 17 and 37 : 2. |
| 13* | D | 100768 | A | 0 | 7.5YR 6/4<br>S : 7.5Y 5 | ø rim : -. |




10 cm

(Photos at various scales)

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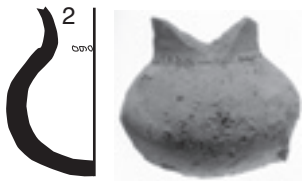
—1500

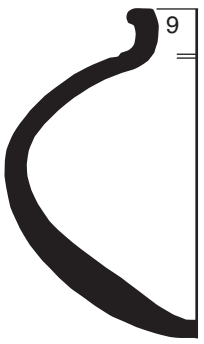
1

—1600

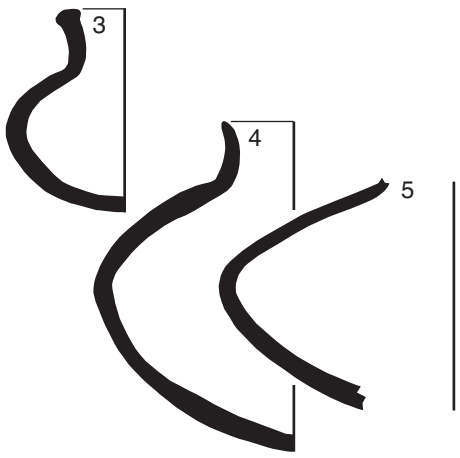



2

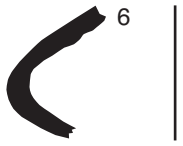
C.P.U.




—1700



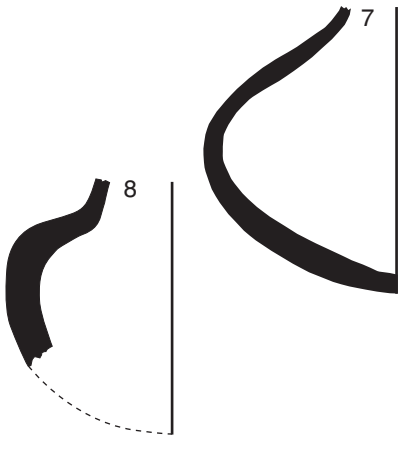

4

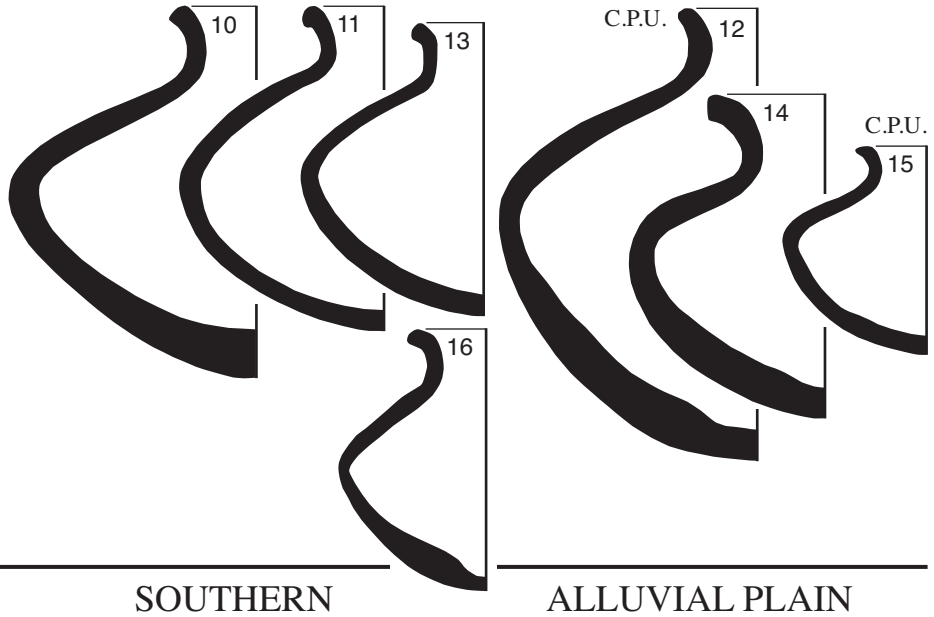



12

—1800

—1900




NORTHERN ALLUVIAL PLAIN SOUTHERN ALLUVIAL PLAIN

—2000

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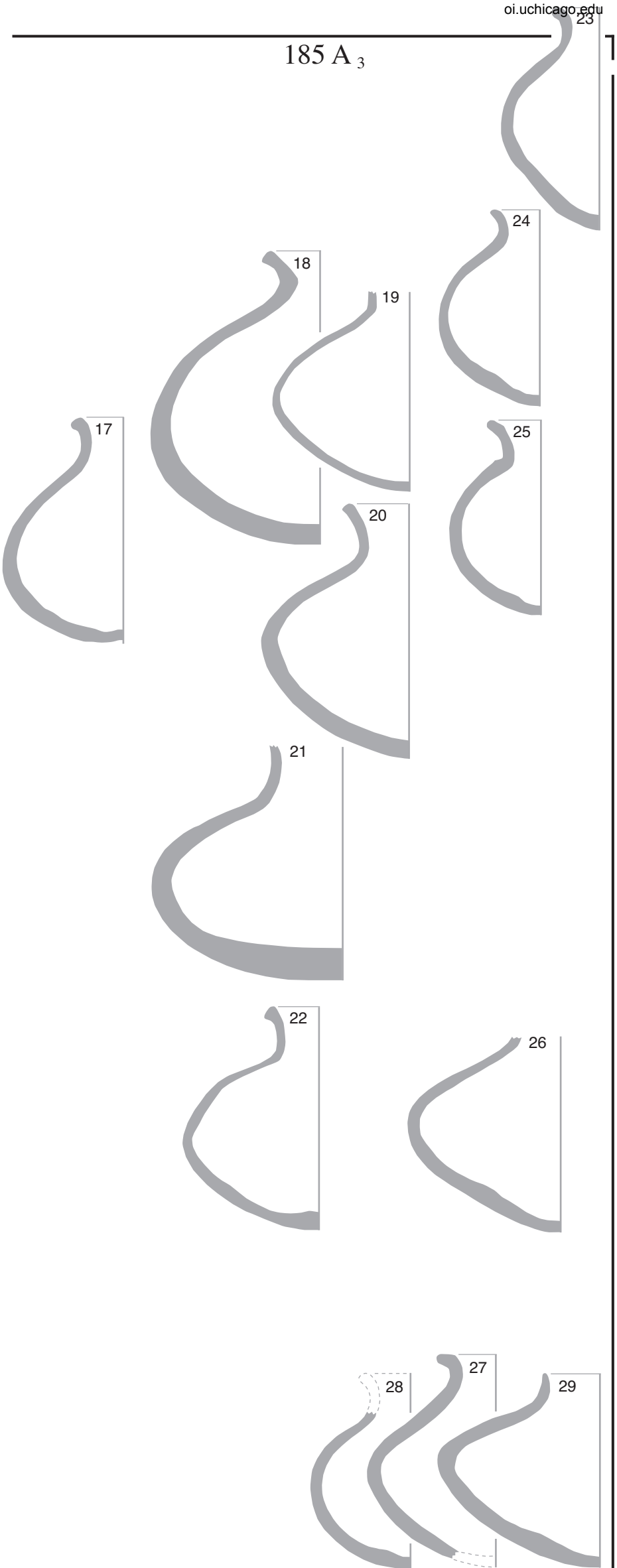
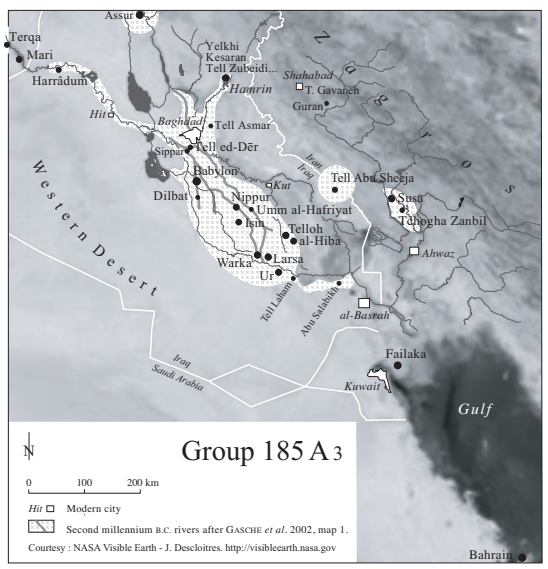



# PLATE 88

## 185 A 3

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 101349 | A | 0 | 5YR 7/6 | ø rim : 28. Pit 1 dug from Ensemble 0. |
| 2* | D | 100186 | A | Ia-c | 5Y 7/2 | ø rim : -. *TD* 1, Pl. 20 : 5. |
| 3 | D | 101726 | B | A 12 | 10YR 8/3 | ø rim : 34. *TD* 2, Pl. 5 : 3. |
| 4* | D | 101905 | A | Ii | 7.5YR 7/4 | ø rim : 38. Burial D.91 dug from Ii. |
| 5* | D | 102735 | A | Ii | 2.5YR 6/6<br>S : 7.5YR 8/4 | ø rim : -. |
| 6* | D | 102946 | A | IIc | 7.5YR 7/4 | ø rim : -. |
| 7* | D | 104132 | A | IIId | 7.5YR 6/4 | ø rim : -. Burial D.269 dug from IIId. *TD* 4, Pl. 11 : 3. |
| 8* | D | 102544 | A | IVb | 5YR 6/6 | ø rim : -. *TD* 4, Pl. 9 : 2. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 9 | W | 20805 | Sînkāšid | 5 | - | ø rim : 39. VAN ESS 1988a, fig. 12 : 101. |
| 10 | N | 2N 1018 | TB IV | | reddish<br>S : buff | ø rim : 45. *OIP* 78, Pl. 83 : 16. |
| 11 | W | 25005 | P 6<br>*Areal* 1 | - | *bräunlich-ziegelrot*<br>S : *creme* | ø rim : 42. Burial 33. *AUWE* 10, Pl. 16 : Grab 33a = VAN ESS 1993, fig. 9 : 145. |
| 12 | T | - | - | | - | ø rim : 41. Louvre, AO 982. Drawn at the Louvre. Photo Louvre. |
| 13 | N | 3P 29 | TB IV | | tan<br>S : buff | ø rim : 38. *OIP* 78, Pl. 83 : 17. |
| 14 | N | 3P 12 | TB IV | | beige<br>S : whitish-buff | ø rim : 62. *OIP* 78, Pl. 83 : 14. |
| 15 | T | T. 112 | - | | - | ø rim : 38. Louvre, AO 15229. Drawn at the Louvre. |
| 16 | N | 17 N 88 | WC-3 | VC | buff | ø rim : 41. Burial 106 dug from VC. |
| MIDDLE EUPHRATES | | | | | | |
| 17 | Din | V 273 | *Bât*. 15 | 3C | *brun clair* | ø rim : 44. *Haradum* 1, fig. 101 : 4. |
| DIYALA | | | | | | |
| 18 | Yel | HY 103 | A | IIIa | *cuoio* | ø rim : 43. GABUTTI 2002-03, Pl. 79 : 8. |
| 19 | Yel | HY 34 | A | IIIa | *giallo-verdastro* | ø rim : -. GABUTTI 2002-03, Pl. 79 : 7. |
| 20 | Hal | 177-1 | A | - | - | ø rim : 54. IM 68108. GHASSAN 1995, Pl. 65 : 69. |
| 21 | Yel | y 325 | B | Vc | *cuoio* | ø rim : -. GABUTTI 2002-03, Pl. 79 : 1. |
| 22 | As | As. 31<br>P. 39a | O<br>30 :19 | - | - | ø rim : 44. *OIP* 63, Pl. 164 : B.664.540c (Larsa). |
| SUSIANA | | | | | | |
| 23 | S | GS-5273 | A | XII *ancien* | *jaunâtre* | ø rim 37. *MDP* 47, Pl. 13 : 8. |
| 24 | S | GS-5803 | A | XIII | 10YR 7/3 | ø rim : 42. Louvre, Sb 18958. PONS 1991, *Catalogue* p. 72 = *MDP* 47, Pl. 13 : 7. |
| 25 | S | GS-5447 | A | XIV | *jaunâtre* | ø rim : 42. *MDP* 47, Pl. 14 : 1. |
| 26 | S | GS-7063 | B | VI | *jaunâtre* | ø rim : -. *MDP* 47, Pl. 14 : 4. |
| 27 | S | GS-6747 | B | VII | *brune* | ø rim : 45. *MDP* 47, Pl. 14 : 5. |
| 28 | S | GS-7055 | B | VII | *brune* | ø rim : -. *MDP* 47, Pl. 14 : 2. |
| 29 | S | GS-7059 | B | VII | *rosâtre* | ø rim : 48. *MDP* 47, Pl. 14 : 8. |

C.P.U. = Chronological Position Uncertain




10 cm

(Photos at various scales)

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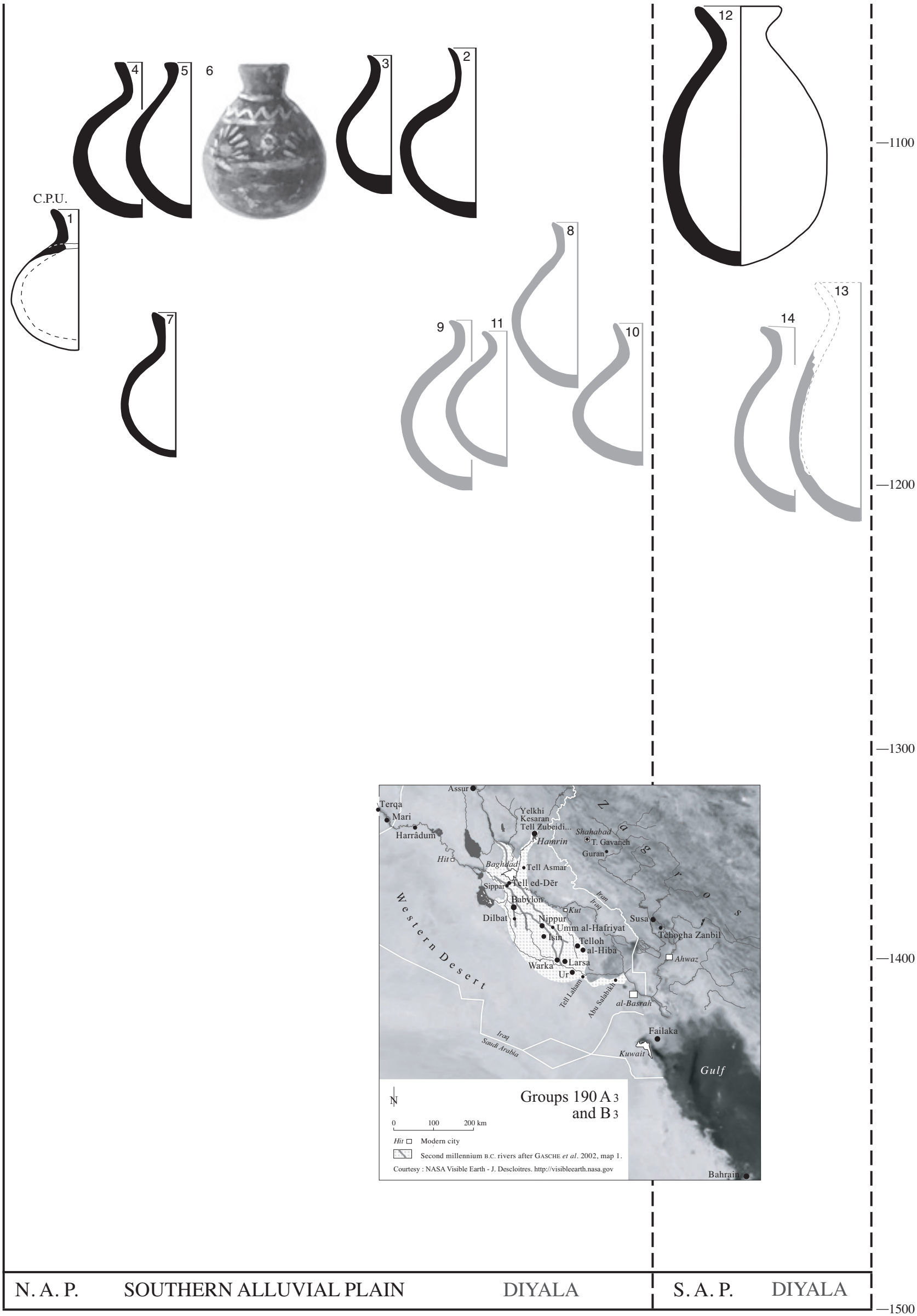
190 A 3

190 B 3




N. A. P. SOUTHERN ALLUVIAL PLAIN DIYALA

S. A. P. DIYALA

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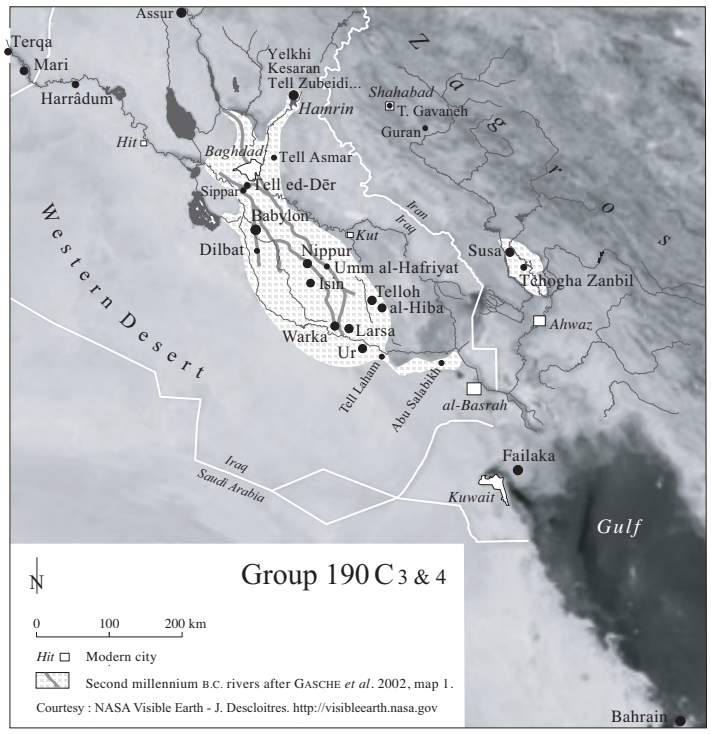
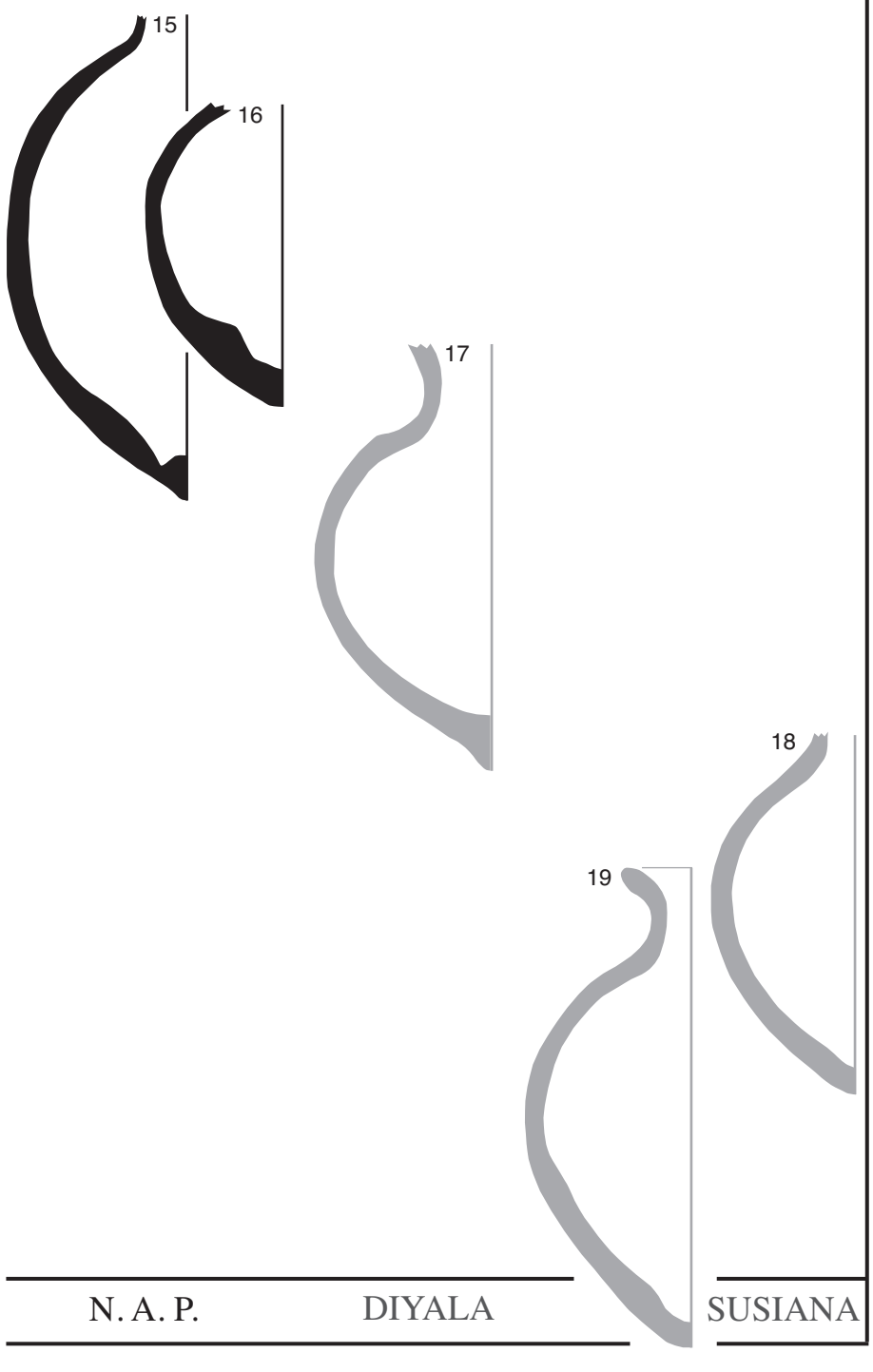
# PLATE 89

## 190 C 3 & 4




N. A. P. DIYALA SUSIANA

## 190 A 3

| Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | |
| 1 B | VA Bab 4292d | Merkes 27n2 | +0,20m From a burial found in the *jüngeren kassitischen Schicht* | - | ø rim : 28. Burial 10. *WVDOG* 47, 164, Pl. 47 : 10. One of four similar irregularly shaped bottles, all with attached neck. Courtesy *Staatliche Museen zu Berlin, Vorderasiatisches Museum*. Drawn by Katja Sternitzke (Ludwig-Maximilians-Universität München). |
| SOUTHERN ALLUVIAL PLAIN | | | | | |
| 2 I | IB 1162a | *NA* II | Intrusive in 2 | - | ø rim : 27. Burial 87. *Isin* 2, 47, Pl. 35 : IB 1162a, first from left. |
| 3 I | IB 1162a | *NA* II | Intrusive in 2 | - | ø rim : 22. Burial 87. *Isin* 2, 47, Pl. 35 : IB 1162a, third from left. |
| 4 I | IB 789d | *NA* II | Intrusive in 2 | - | ø rim : 26. Burial 49. *Isin* 2, 41-42, Pl. 34. Traces of white-painted design. |
| 5 I | IB 600d | *NA* II | Intrusive in 2 | - | ø rim : 23. Burial S 34. *Isin* 1, 29, Pl. 28. White-painted design on red ground. |
| 6 I | IB 600a | *NA* II | Intrusive in 2 | *braun* | ø rim : 24. Burial S 34. *Isin* 1, 29, 61, Pl. 37. White-painted design on red ground. |
| 7 W | 23340 | Qd 24-2 | +10,36m | *rot* | ø rim : 25. Painted in red. Burial 81. *AUWE* 10, Pl. 44 : Grab 81. |
| DIYALA | | | | | |
| 8 Zub | 80/274 | - | Post I | *rötlich* | ø rim : 25. Burial 54. *BaF* 7, 44, 46, 48, Pl. 132 : 437. |
| 9 Iml | 78/7 | - | - | *bräunlichrot* | ø rim : 23. Burial 2. Traces of white-painted design. *BaF* 7, 5-8, 12, 15, Pls. 53 : 279 and 57 : 279. |
| 10 Iml | 78/51 | - | - | *rötlich* | ø rim : 29. Burial 13. *BaF* 7, 6-8, 12, 15, Pls. 53 : 277 and 57 : 277. |
| 11 Zub | 80/305 | - | I or Post I | *rötlich* | ø rim : 23. Burial 45. *BaF* 7, 43, 46, 48, Pl. 132 : 436. |

## 190 B 3

| Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | |
| 12 I | IB 407 | *NA* II | Intrusive in 2 | - | ø rim : 42. Burial S 27. *Isin* 1, 29, 62, Pl. 5 : 3 and Pl. 28. Green glazed. |
| DIYALA | | | | | |
| 13 Zub | 79/268 | - | Post I | *graugelb* | ø rim : -. Burial 8. *BaF* 7, 40, 46, 48, Pl. 132 : 440. |
| 14 Zub | 79/267 | - | Post I | *graugelb* | ø rim : 33. Burial 8. *BaF* 7, 40, 46, 48, Pl. 132 : 439. |

## 190 C 3 & 4

| Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | |
| 15 D | 106952 | E3 | 0 | 10YR 6/1 | ø rim : -. Pit 1 dug from Ensemble 0. |
| 16 D | 103091 | E | 0 | 7.5YR 6/4 | ø rim : -. Pit 1 dug from Ensemble 0. |
| DIYALA | | | | | |
| 17 Yel | HY 8 | A | Ia-b | *rossastro* | ø rim : -. VALTZ 2002-03, Pl. 151 : 16. |
| SUSIANA | | | | | |
| 18 S | GS-4210 | A | XI *ancien* | 10YR 5/1 | ø rim -. Louvre, Sb 4734. PONS 1991, *Catalogue* p. 22 = *MDP* 47, Pl. 13 : 1. |
| 19 S | GS-5238 | A | XII *ancien* | | ø rim : 39. *MDP* 47, Pl. 13 : 3. |

10 cm

(Photos at various scales)

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195 A 2 | 195 B 1 | 195 B 2

—1000

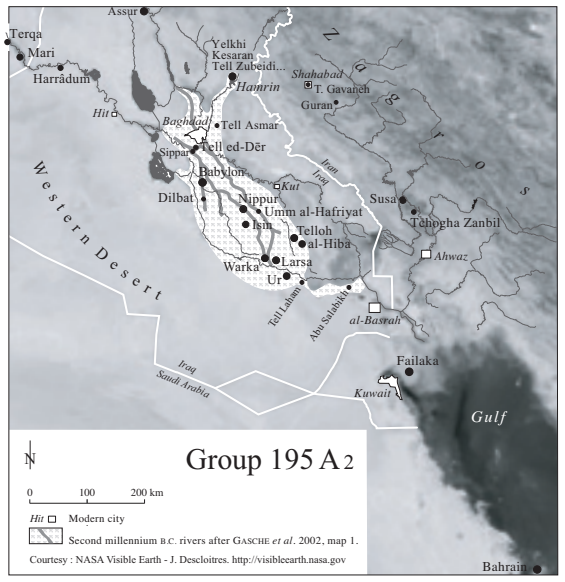
2 3

8 9 10

—1100

C.P.U.

1 4




11

5 6 7

—1200

N. A. P. | S. A. P. | DIYALA | S. A. P. | S. A. P. | DIYALA

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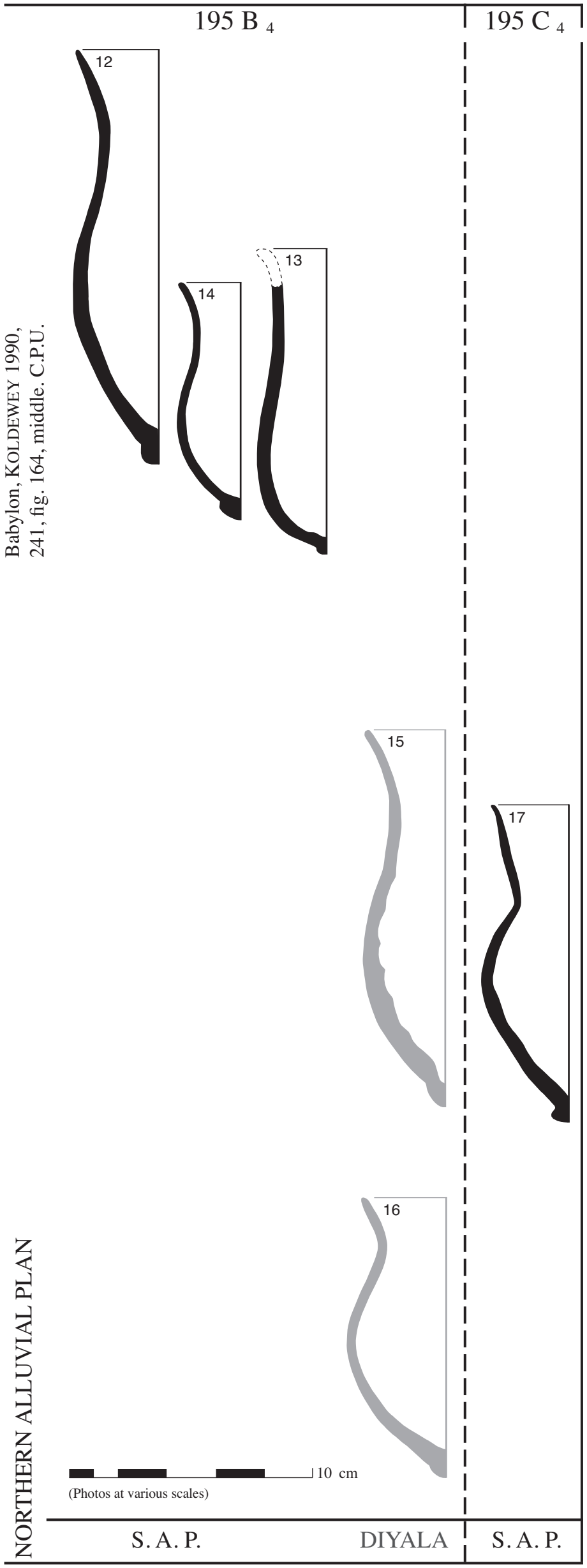
# PLATE 90




## 195 A 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | B | - | - | - | - | ø rim : ± 58. *WVDOG* 47, fig. 9 : l. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 2 | I | IB 736a | *NA* II | Intrusive in 2 | - | ø rim : 72. Burial 43a. *Isin* 2, 40, Pl. 33. |
| 3 | I | IB 736b | *NA* II | Intrusive in 2 | - | ø rim : 70. Burial 43a. *Isin* 2, 40, Pl. 33. |
| 4 | I | 0085 | *NA* II | 7,84m | *grünlich* | ø rim : 67. |
| DIYALA | | | | | | |
| 5 | Iml | 78/55 | - | - | - | ø rim : 66. Burial 13. *BaF* 7, 6-8, 12, Pl. 50 : 214. |
| 6 | Aja | Uc 264, lot 39* | K 15 | IV | buff | ø rim : 67. Burial 2 dug from IV. ARMSTRONG 1981, Pl. 116 : 9. |
| 7 | Zub | 80/168 | - | I | - | ø rim : 63. *BaF* 7, 48, Pl. 130 : 385. |

## 195 B 1

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 8 | I | IB 624 | *NA* II | Intrusive in 2 | - | ø rim : 64. Burial S 37. *Isin* 1, 30, Pl. 28. |

## 195 B 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 9 | I | IB 631 | *NA* II | Intrusive in 2 | - | ø rim : 60. Burial S 39. *Isin* 1, 30 and *Isin* 2, 40, Pl. 33. |
| 10 | I | IB 405 | *NA* II | Intrusive in 2 | - | ø rim : 59. Burial S 27. *Isin* 1, 29, 62, Pls. 5 : 3 and 28. |
| DIYALA | | | | | | |
| 11 | Zub | 79/264 | - | Post I | - | ø rim : 65. Burial 8. *BaF* 7, 40, 48, Pl. 130 : 382. |

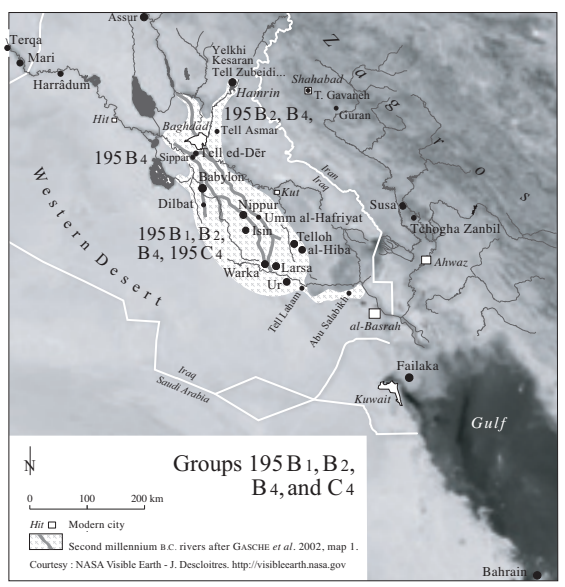
## 195 B 4

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 12 | N | 2P 263 | Enlil Temple | III | reddish | ø rim : 67. *OIP* 78, Pl. 28 : 10. |
| 13 | W | 23705 | Oc XV 2 | - | - | ø rim : -. BOEHMER 1988, Pl. 16 : 31. |
| 14 | I | IB 991 | *NA* II | 1[1)] | - | ø rim : 52. *Isin* 2, 87, Pl. 31 : 30. |
| DIYALA | | | | | | |
| 15 | Zub | 79/265 | - | Post I | - | ø rim : 65. Burial 8. *BaF* 7, 40, 48, Pl. 132 : 434. |
| 16 | Zub | 80/92 | - | I | - | ø rim : 69. *BaF* 7, 48, Pl. 132 : 433. |

## 195 C 4

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 17 | I | IB 1077b | *NA* II | 2 | - | ø rim : 52. Burial 91 dug from *Schicht* 2. *Isin* 2, 47, Pl. 31 : 30. |

1) This vessel is published as coming from Level 1, which is dated by the excavators to the Neo-Babylonian Period (*Isin* 2, 40). This vessel, however, is an Isin II shape.



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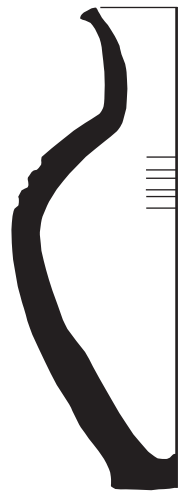
—1700

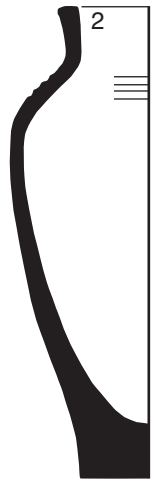
= Pl. 92 : 10

= Pl. 92 : 14

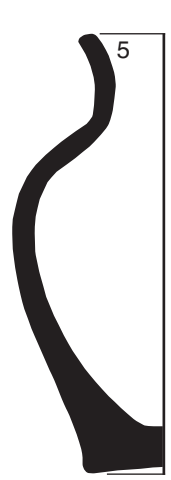


= Pl. 92 : 13

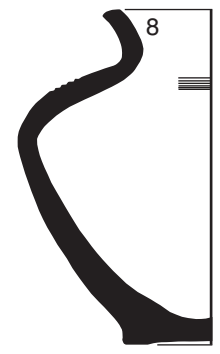
1

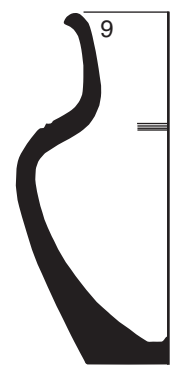


—1800



—1900




—2000

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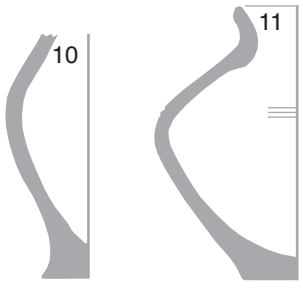



## 200 A 1

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | D | 102313 | A | Ii | 10YR 6/4 | ø rim : 44. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 2 | N | 3P 586 | TA | XII 2 | tan<br>S : buff | ø rim : 49. Burial 3B 92 probably dug from XII 2. *OIP* 78, Pl. 90 : 16. |
| 3 | U | 1 UmH 212 | A | II | 10YR 7/4 | ø rim : 57. Burial 18 dug from II. |
| 4 | U | 1 UmH 211 | A | II | 7.5YR 7/4 | ø rim : 64. Burial 18 dug from II. |
| 5 | N | 3P 552 | TA | XIII | tan<br>S : whitish-buff | ø rim : 44. *OIP* 78, Pl. 91 : 5. |
| 6 | N | 3P 547 | TA | XIII 2 | tan<br>S : whitish-buff | ø rim : 43. *OIP* 78, Pl. 91 : 4. |
| 7 | N | 3P 89 | TB | V 1 | tan | ø rim : 43. *OIP* 78, Pl. 85 : 8. |
| 8 | N | 3P 328 | TB | VI or V | tan | ø rim : 56. Burial 3B 63 dug from VI or V. *OIP* 78, Pl. 85 : 14. |
| 9 | N | 3P 322 | TB | VII 2 | tan<br>S : buff | ø rim : 56. *OIP* 78, Pl. 85 : 7. |
| DIYALA | | | | | | |
| 10 | As | As. 31 : P. 138 | L 30 : 1 | - | - | ø rim : -. *OIP* 63, Pl. 145 : A.656.700 (Larsa). |
| 11 | Yel | HY 468 | B | Vb | *rossastro* | ø rim : 33. GABUTTI 2002-03, Pl. 74 : 10. |

Continued on Pl. 92

10 cm

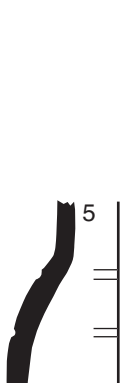
(Photos at various scales)

200 A 1

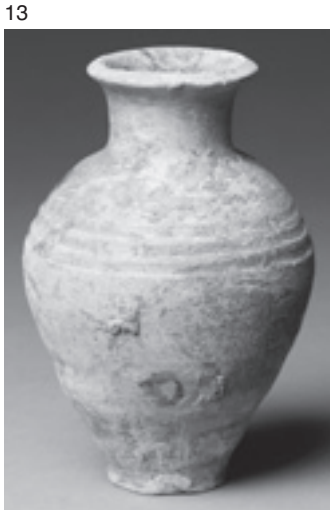
—1500

1

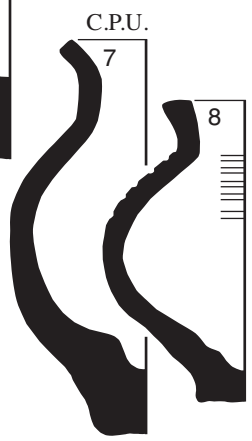
—1600

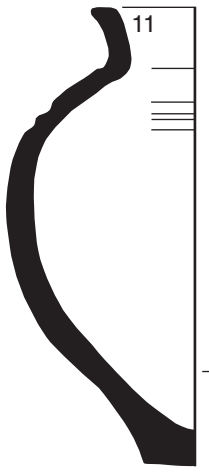


4

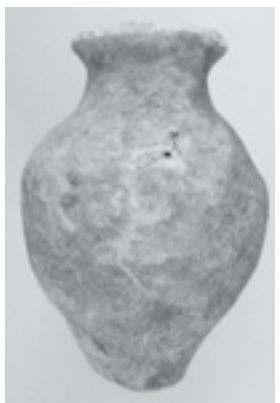


13



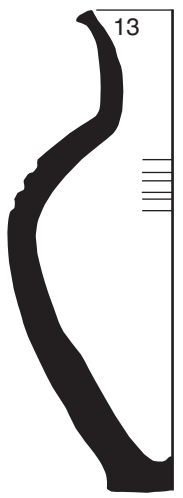



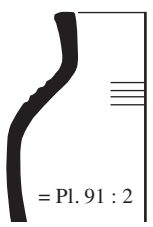
—1700



7

= Pl. 91 : 1



= Pl. 91 : 2

—1800

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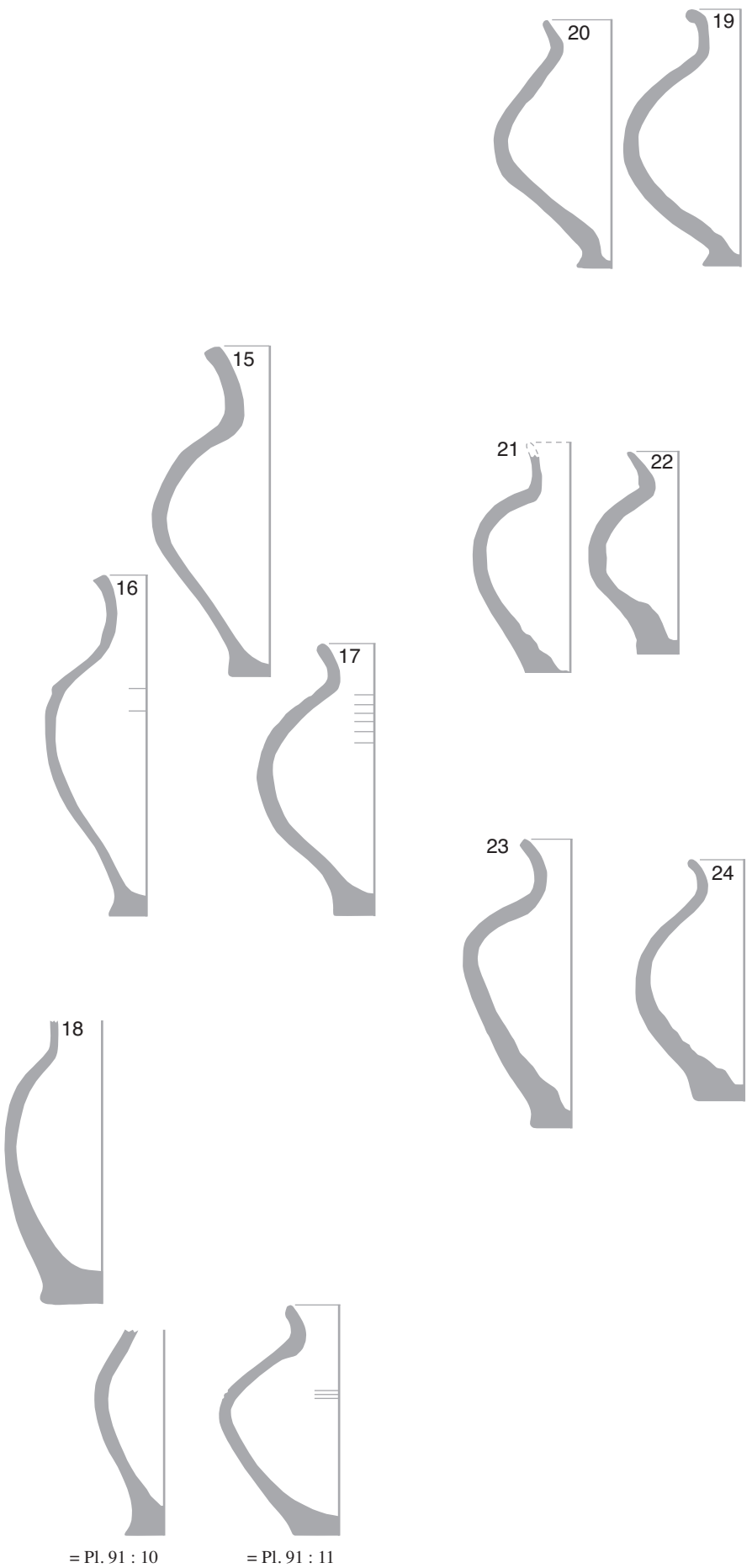
# 200 A 1

Also attested in Susa, A XII




DIYALA SUSIANA

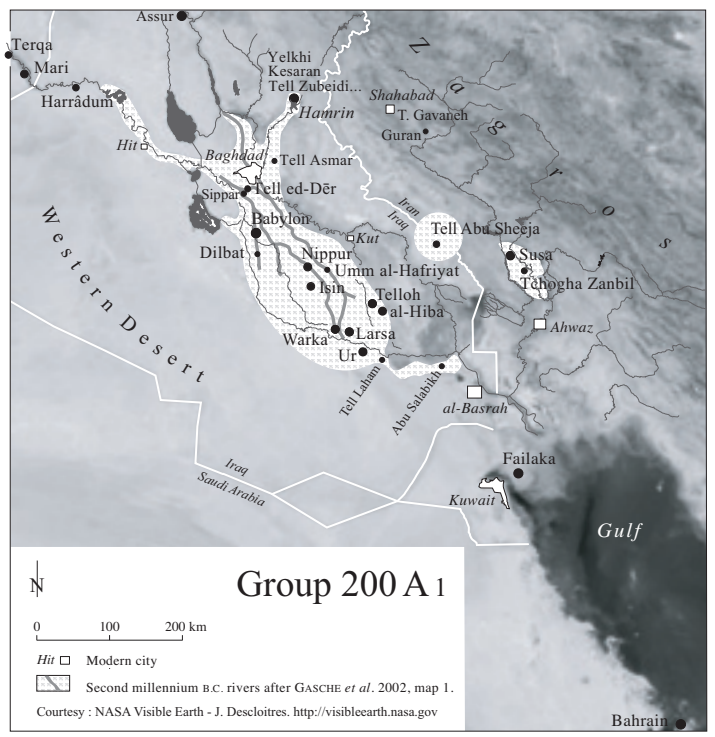
# PLATE 92

## 200 A 1

Continued from Pl. 91

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | D | 105726 | E | IIId | 10YR 8/3 | ø rim : 43. *MHEM* 1, Pl. 37 : 7. |
| 2* | D | 105815 | E | IIId | 10YR 7/4 | ø rim : 39. Burial D.327 probably dug from IIId. *MHEM* 1, Pls. 15 and 37 : 6. |
| 3 | D | 100379 | A | Ia | 5Y 7/2 | ø rim : 47. *TD* 1, Pl. 20 : 2. |
| 4 | D | 101714 | A | Ia | 5YR 4/6 | ø rim : 46. |
| 5 | D | 101293 | A | Ic | 7.5YR 6/4 | ø rim : -. |
| 6 | D | 100907 | A | Ic | 7.5YR 6/4 | ø rim : -. |
| 7 | K | P. 195 | - | - | *jaune* | ø rim : 45. Louvre, AO 10605. Drawn at the Louvre. DE GENOUILLAC 1925, 28, Pl. XX : 5. Photo Louvre. |
| 8 | D | 100323 | A | Ie | 5YR 6/6 | ø rim : 44. *TD* 1, Pl. 20 : 4. |
| 9 | D | 100354 | A | If | 10YR 7/3 | ø rim : 40. *TD* 1, Pl. 20 : 3. |
| 10 | D | 101722 | A | Ig | 2.5Y 8/4 | ø rim : 35. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 11 | N | A 2057 | WB | IV 1 | pink-buff S : cream | ø rim : 56. |
| 12 | H | 1 H 56 | B | - | - | ø rim : 40. |
| 13 | T | T. 184 | - | - | - | ø rim : 50. Louvre, AO 24627. Drawn at the Louvre. Photo Louvre. |
| 14 | N | 2N 18 | TB | II 1 | brownish S : buff | ø rim : 36. *OIP* 78 Pl. 91 : 6. |
| DIYALA | | | | | | |
| 15 | Yel | HY 130 | B | IIIb | *giallo-verdastro* | ø rim : 40. GABUTTI 2002-03, Pl. 75 : 4. |
| 16 | Yel | HY 305 | B | IVb | *cuoio* | ø rim : 32. GABUTTI 2002-03, Pl. 75 : 3. |
| 17 | Yel | HY 304 | B | IVb | *cuoio* | ø rim : 36. GABUTTI 2002-03, Pl. 74 : 19. |
| 18 | Yel | y 245 | B | Va | *giallo-verdastro* | ø rim : -. GABUTTI 2002-03, Pl. 75 : 5. |
| SUSIANA | | | | | | |
| 19 | S | GS-5453 | A | XIII | *jaunâtre* | ø rim : 29. *MDP* 47, Pls. 12 : 6 and 59 : 11. |
| 20 | S | GS-5421 | A | XIII | 2.Y 8/4 | ø rim : 43. Louvre, Sb 18951. PONS 1991, Pl. 32 : 4. |
| 21 | S | GS-5845 | A | XIV | *brune* | ø rim : -. *MDP* 47, Pls. 12 : 13 and 59 : 12. |
| 22 | S | GS-6073 | A | XIV | 2.5Y 8/4 | ø rim : 29. Louvre, Sb 18953. PONS 1991, Pl. 32 : 9 = *MDP* 47, Pl. 12 : 8. |
| 23 | S | GS-6107 | A | XV | *jaunâtre* | ø rim : 33. *MDP* 47, Pl. 12 : 20. |
| 24 | S | GS-6049 | A | XV | *jaunâtre* | ø rim : 33. *MDP* 47, Pl. 12 : 10. |

C.P.U. = Chronological Position Uncertain




10 cm

(Photos at various scales)

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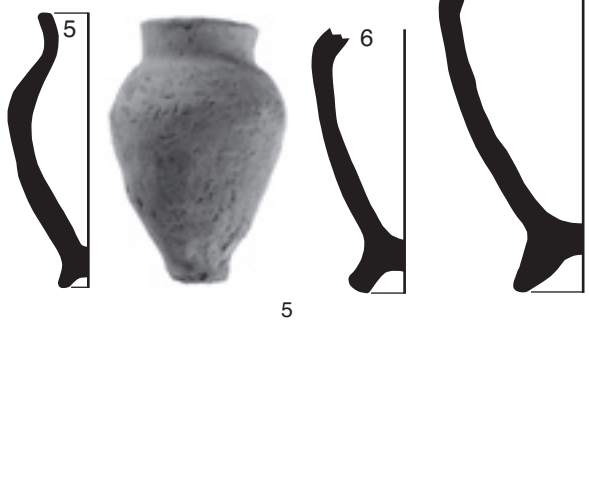
200 A 2

200 A 3

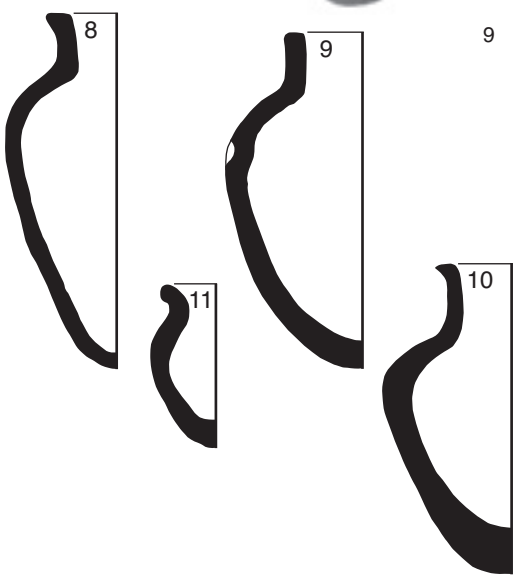
1

2




5

9




—1600

—1700

—1800

NORTHERN ALLUVIAL PLAIN

NORTHERN ALLUVIAL PLAIN

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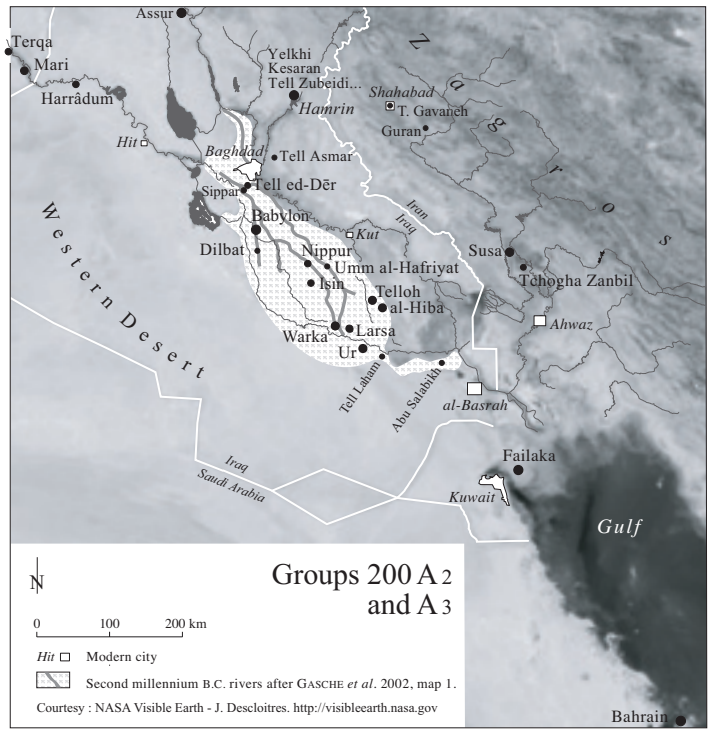
# PLATE 93

## 200 A 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 100293 | A | 0 | 7.5YR 6/4 | ø rim : -. |
| 2* | D | 101297 | A | 0 | 5YR 5/4 | ø rim : -. |
| 3 | D | 105779 | E | VIb | 10YR 7/4 | ø rim : 22. |
| 4 | D | 101914 | A | Ig | 7.5YR 6/4 | ø rim : 42. |
| 5 | D | 101352 | A | Ig | 10YR 7/6 | ø rim : 27. |
| 6* | D | 102738 | A | Ig | 7.5YR 6/4 | ø rim : -. |
| 7* | D | 101788 | A | Ii | 5YR 6/6 | ø rim : -. |

## 200 A 3

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 8 | D | 101860 | A | Ig | 2.5YR 6/8 | ø rim : 38. *TD* 2, Pl. 22 : 7. |
| 9 | D | 101971 | A | Ig | 5YR 6/4 | ø rim : 41. *TD* 2, Pl. 22 : 8. |
| 10 | D | 102951 | A | Ii | 2.5Y 7/2 | ø rim : 42. |
| 11 | D | 101918 | A | Ih | 7.5YR 7/4 | ø rim : 30. |




10 cm

(Photos at various scales)

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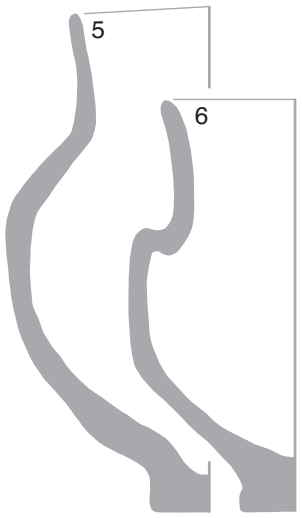
205 A 1

205 A 2

1

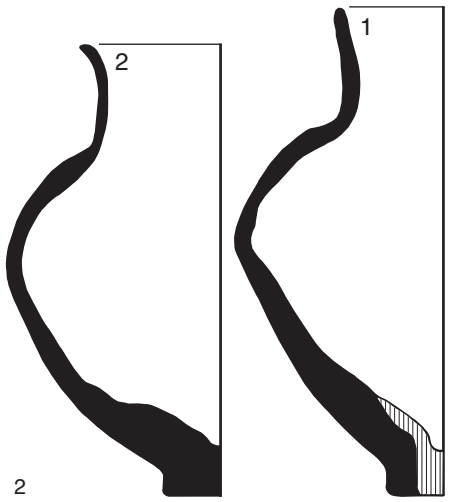


5

6

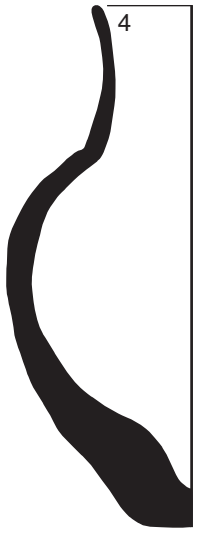
9

—1200

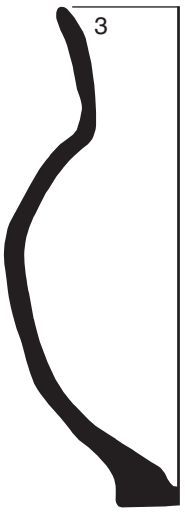


2

1

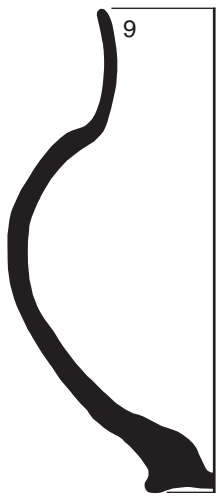


4



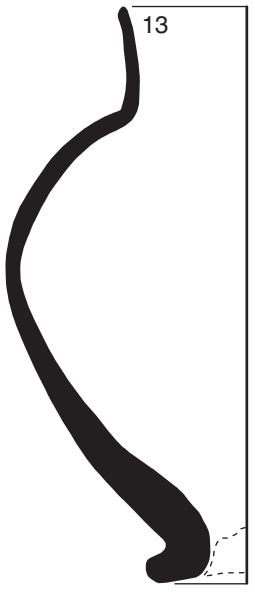
3

3



9

—1300



13

—1400

N. A. P.

S. A. P.

DIYALA

N. A. P.

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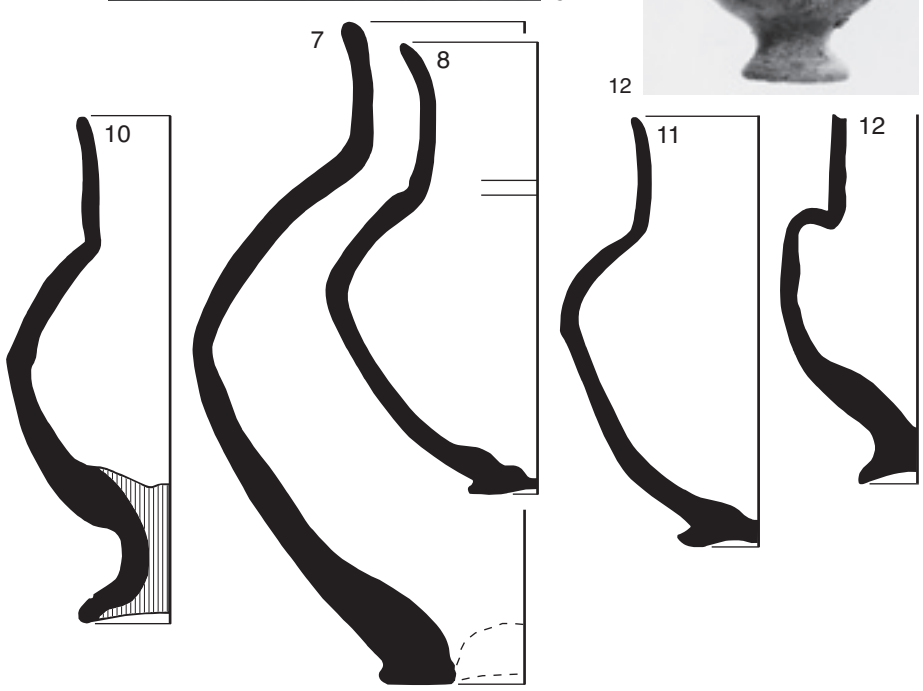
## 205 A 2

8

12



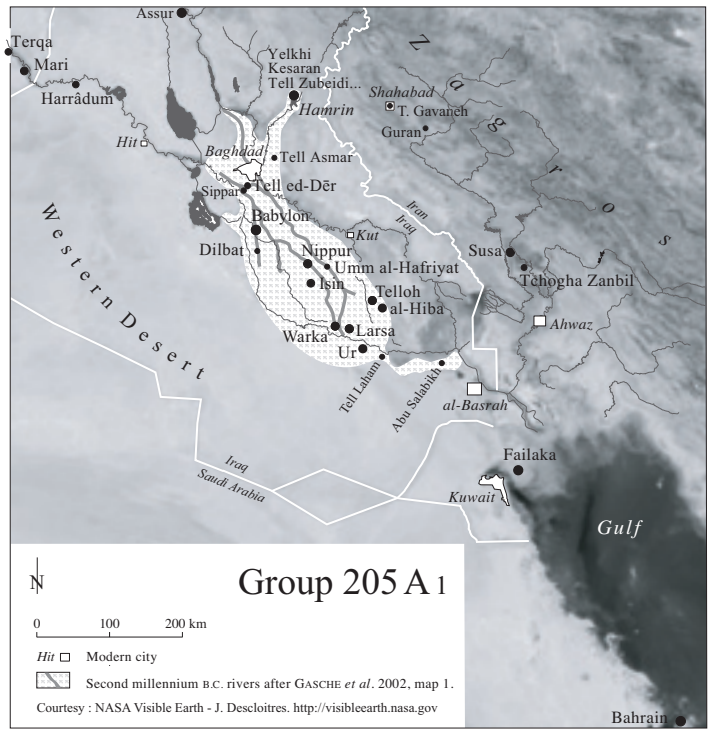
## 205 A 1

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 107685 | E3 | 0 | 5YR 7/3 | ø rim : 58. Filled-in base. Pit 1 dug from Ensemble 0. *NAPR* 6, Pl. 15 : 8. |
| 2* | D | 103057 | E | 0 | 2.5Y 8/2 | ø rim : 72. Pit 1 dug from Ensemble 0. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 3 | N | 14 N 59 | WC-1 | II | buff | ø rim : 64. *OIP* 111, Pl. 82 : d. |
| 4 | N | D 720 | WC-1 | III | buff<br>S : cream | ø rim : 53. *OIP* 111, Pl. 81 : h. |
| DIYALA | | | | | | |
| 5 | Kes | HK 17/3 | - | II | - | ø rim : 72. Burial 6. |
| 6 | Zub | 80/34 | - | I | *rötlich* | ø rim : 62. *BaF* 7, 46, 48, Pl. 130 : 377. |

## 205 A 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 7 | Dey | A 54.1 | B | I | 5Y 7/4 | ø rim : 100. Plugged base. |
| 8 | Dey | 1 D 14 | B | I | 5Y 8/3-4 | ø rim : 72. |
| 9* | D | 103294 | E | 0 | 2.5Y 7/8 | ø rim : 60. Pit 1 dug from Ensemble 0. |
| 10* | D | 107640 | E3 | 0 | 10YR 8/3 | ø rim : 48. Filled-in base. Pit 1 dug from Ensemble 0. *NAPR* 6, Pl. 15 : 10. |
| 11 | D | 107286 | E3 | 0 | 10YR 7/3 | ø rim : 67. Burial D.337B dug from Ens. 0. GASCHE 1991, 27, fig. 5 : 5. |
| 12* | D | 103811 | E | 0 | 5YR 7/3 | ø rim : -. Pit 1 dug from Ensemble 0. |
| 13* | D | 107376 | E3 | Ia1 | 7.5YR 8/2 | ø rim : 69. Plugged base. Burial D.361 dug from Ia, probably Sub-Phase 1. *NAPR* 6, Pl. 14 : 12 and *MHEM* 4, Pl. 2 : 4. |
| 14* | D | 107373 | E3 | Ic1 | 7.5YR 6/4<br>S : 2.5Y 8/2 | ø rim : -. |

Continued on Pl. 95




10 cm

(Photos at various scales)

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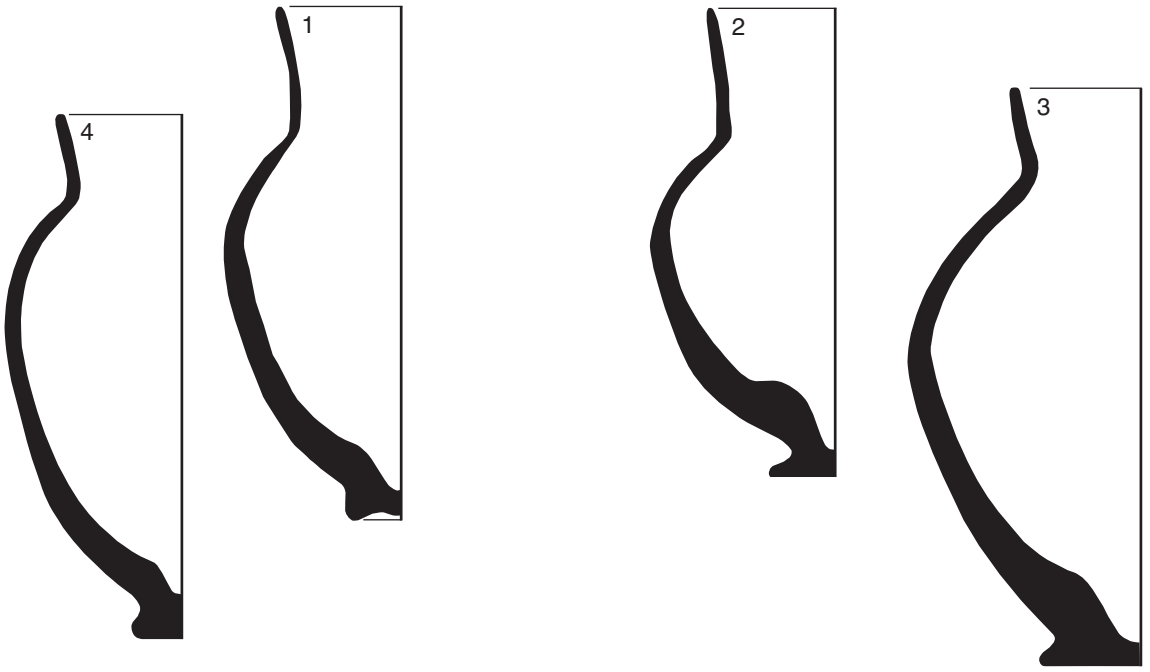
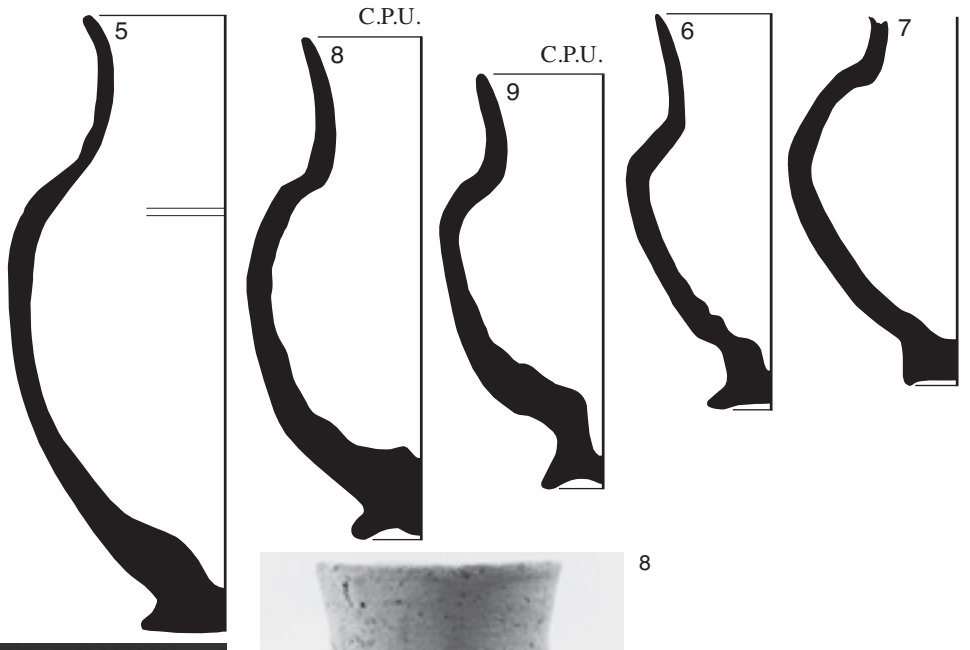



—1100

—1200



—1300

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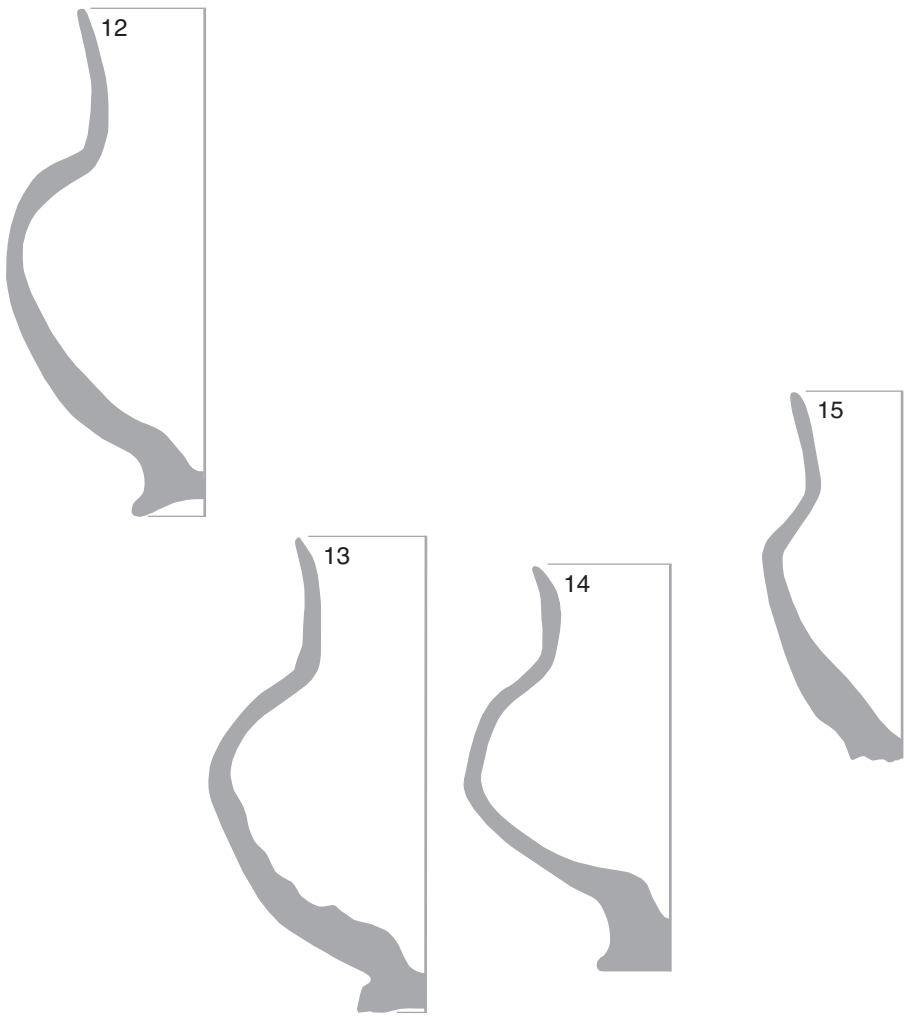




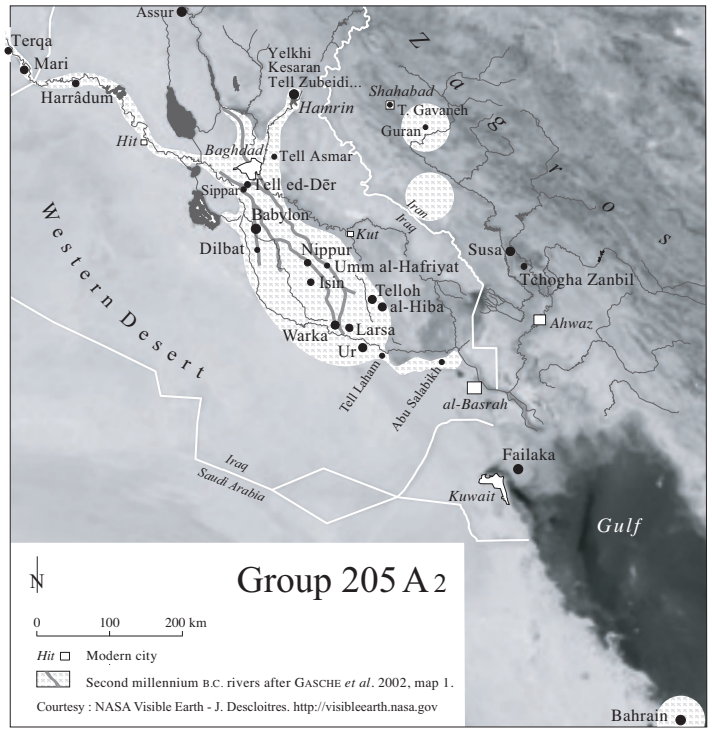

# PLATE 95

## 205 A 2

Continued from Pl. 94

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | I | IB 828a | *NA* II | Intrusive in 2 | - | ø rim : 65. Burial 56. *Isin* 2, 43, Pl. 34. |
| 2 | I | IB 829b | *NA* II | Intrusive in 2 | - | ø rim : 67. Burial 57. *Isin* 2, 43, Pl. 34. |
| 3 | I | IB 975 | *NA* II | 7,84m | *graugrünlich* | ø rim : 67. *Isin* 2, 86, Pl. 31 : 18. |
| 4 | I | IB 977 | *NA* II | 7,84m | - | ø rim : 66. *Isin* 2, Pl. 31 : 20. |
| 5 | N | 16 N 22 | TC | VII | pink | ø rim : 77. Burial 5 dug from VII. |
| 6 | N | 14 N 36 | WC-1 | II | - | ø rim : 64. *OIP* 111, Pl. 82 : b. |
| 7 | N | D 78 | WC-1 | II | - | ø rim : -. |
| 8 | L | L. 39 | - | - | 2.5Y 8/2 | ø rim : 65. Exc. Parrot, 1933. Louvre, AO 17020. Drawn at the Louvre. PARDO 1979, Pl. 32. |
| 9 | L | L. 228 | *N.E.* Q VII, b5 | - | 10YR 8/2 | ø rim : 66. Exc. Parrot, 1933. Louvre, AO 17022. Drawn at the Louvre. PARDO 1979, Pl. 32 (under No. 223). |
| 10 | N | C 1283 | WC-1 | III | green | ø rim : 78. *OIP* 111, Pl. 81 : g. *MHEM* 4, Pl. 2 : 10. |
| 11 | N | 13 N 505 | WB | III | - | ø rim : 82. *MHEM* 4, Pl. 2 : 11. |
| DIYALA | | | | | | |
| 12 | Kes | HK 17/1 | - | II | - | ø rim : 67. Burial 6. |
| 13 | Zub | 79/218 | - | II | - | ø rim : 68. *BaF* 7, 46, Pl. 109 : 82. |
| 14 | Zub | 80/277 | - | II | - | ø rim : 71. Burial 59 probably dug from II. *BaF* 7, 45, 46, Pl. 109 : 83A. |
| GULF | | | | | | |
| 15 | Bah | - | Exc. 428 | 8 | - | ø rim : 184. HØJLUND 1987, fig. 696. Period IIIB = IIIb 2 (see HØJLUND and ANDERSEN 1997, 61). Base broken. |

C.P.U. = Chronological Position Uncertain




10 cm

(Photos at various scales)

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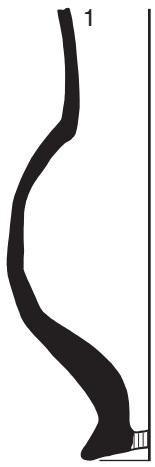
—1200

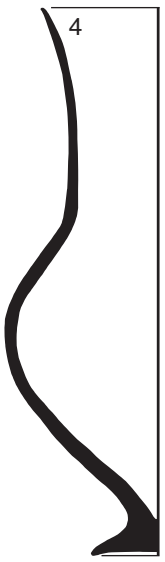
—1300

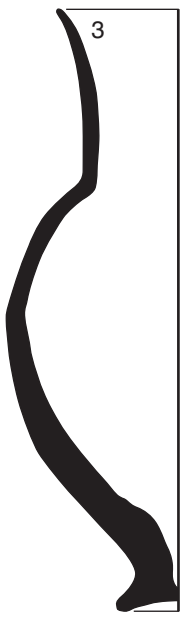
—1400

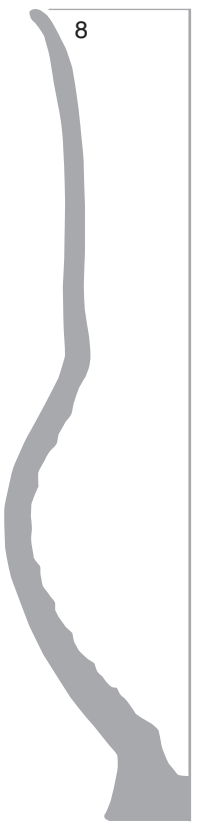
5

2









N. A. P. S. A. P. DIYALA SUSIANA GULF

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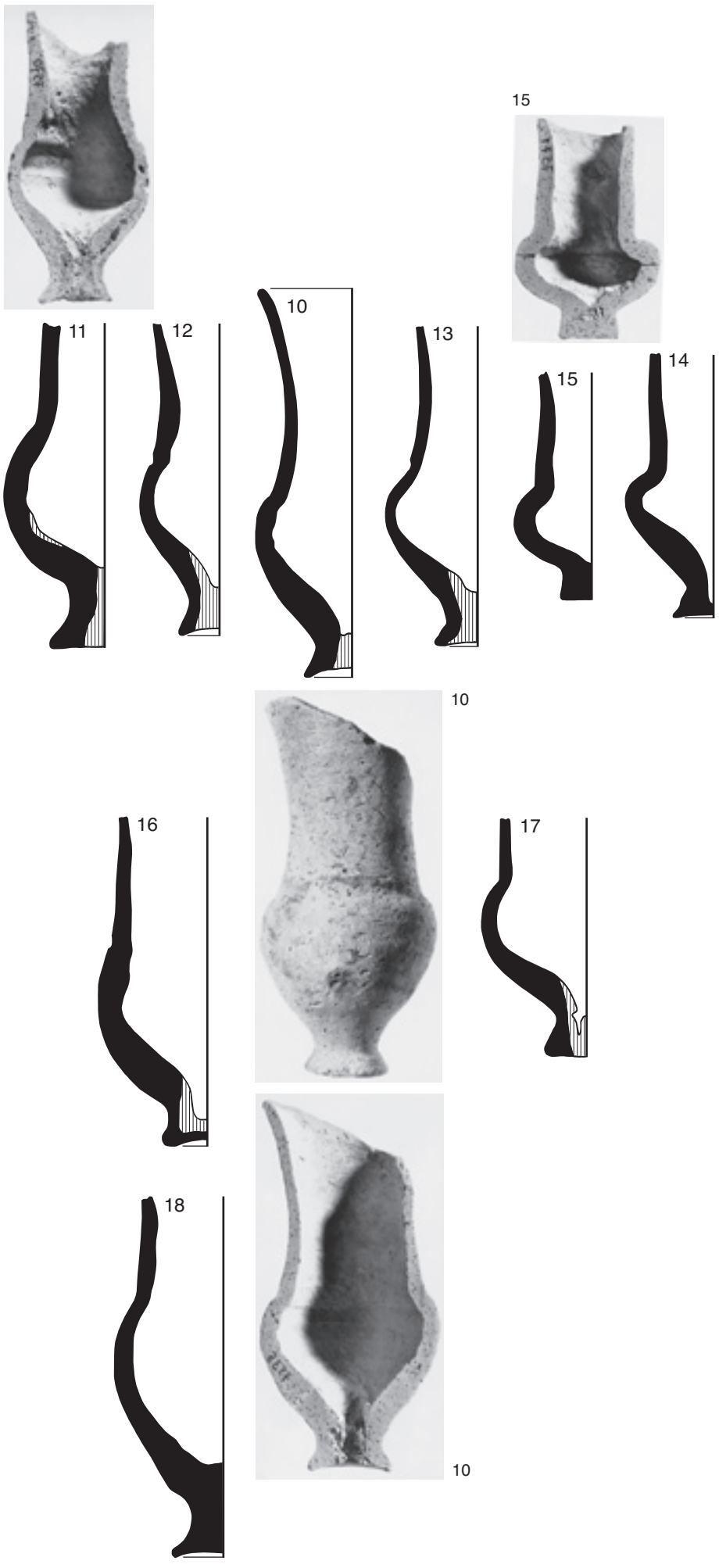
# PLATE 96

## 210 B 2



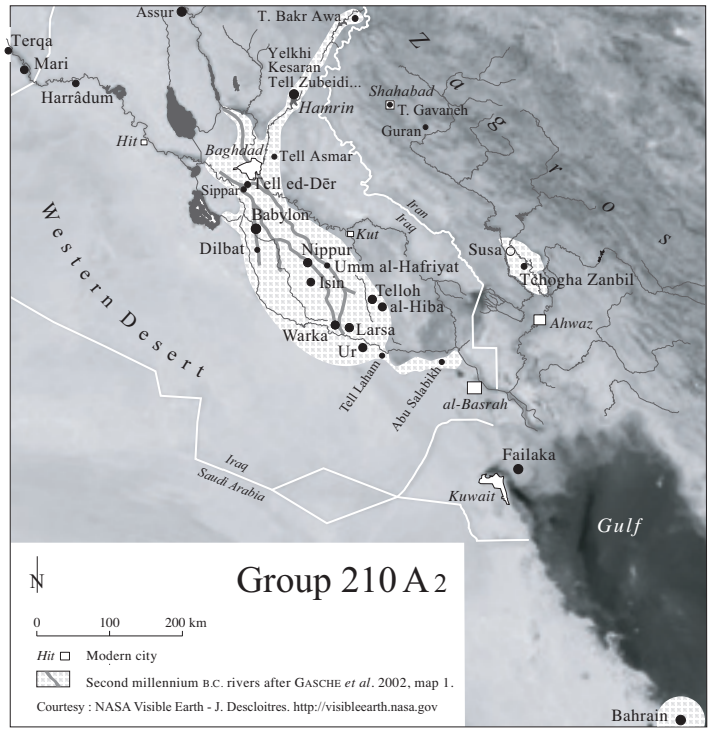

## 210 A 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 109382 | E3 | Ia1 | 7.5YR 8/4 | ø rim : -. Filled-in base. *NAPR* 6, Pl. 12 : 2 and *MHEM* 4, Pl. 3 : 3. |
| 2* | D | 109389 | E3 | Ic (probably Ic1) | 5Y 8/4 | ø rim : 66. Filled-in base. *NAPR* 6, Pl. 12 : 3 and *MHEM* 4, Pl. 3 : 4. |
| 3 | Sip | 2816 | V/105 C4 | - | - | ø rim : 65. Burial 5 intrusive in Layer 3. *Sumer* 52, figs. 11 and 23 : 2816. The same cup is illustrated without lip in *BaM* 36, Pl. 23 : 2816. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 4 | N | 13 N 525 | WB | III | light buff | ø rim : 62. |
| 5 | N | 13 N 494 | WB | III | light buff | ø rim : 70. *MHEM* 4, Pl. 3 : 13. |
| DIYALA | | | | | | |
| 6 | Yel | HY 1 | A | Post Ia | *giallo-verdastro* | ø rim : 58. Burial 25. VALTZ 2002-03, Pl. 151 : 1. |
| 7 | Yel | HY 13 | A | Post Ia | *giallo-verdastro* | ø rim : 70. Burial 9. VALTZ 2002-03, Pl. 150 : 6 (mislabeled). FIORINA 2007, 19, fig. 28 : e. |
| SUSIANA | | | | | | |
| 8 | S | GS-4209 | A | XI *ancien* | *rougeâtre* | ø rim : 42. *MDP* 47, Pl. 19 : 4. |
| GULF | | | | | | |
| 9 | Bah | 93.378 | *Palais d'Oupéri* | - | - | ø rim : 49. Courtesy P. Lombard. |

## 210 B 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 10* | D | 107535 | E3 | 0 | 7.5YR 7/4 | ø rim : 62. Filled-in base. Pit 1 dug from Ensemble 0. *MHEM* 4, Pl. 3 : 1. |
| 11* | D | 107569 | E3 | 0 | 5YR 8/4 | ø rim : -. Filled-in base. Pit 1 dug from Ensemble 0. |
| 12* | D | 107570 | E3 | 0 | 10YR 8/3 | ø rim : -. Filled-in base. Pit 1 dug from Ensemble 0. |
| 13* | D | 107606 | E3 | 0 | 7.5YR 8/4 | ø rim : -. Filled in base. |
| 14* | D | 107645 | E3 | 0 | 7.5YR 6/4 | ø rim : -. |
| 15* | D | 107571 | E3 | 0 | 10YR 8/4 | ø rim : -. |
| 16* | D | 109381 | E3 | Ia1 | 2.5YR 8/2 | ø rim : -. Filled-in base. *NAPR* 6, Pl. 12 : 6. |
| 17* | D | 109415 | E3 | Ia1 | 7.5YR 8/4 | ø rim : -. Filled-in base. *NAPR* 6, Pl. 12 : 8. |
| 18* | D | 107367 | E3 | Ib | 5YR 6/6 S : 7.5YR 8/4 | ø rim : -. |

Continued on Pl. 97




10 cm

(Photos at various scales)

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1

1

5

6

4

2

C.P.U.

3

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13

7

7

8

—1200

—1300

—1400

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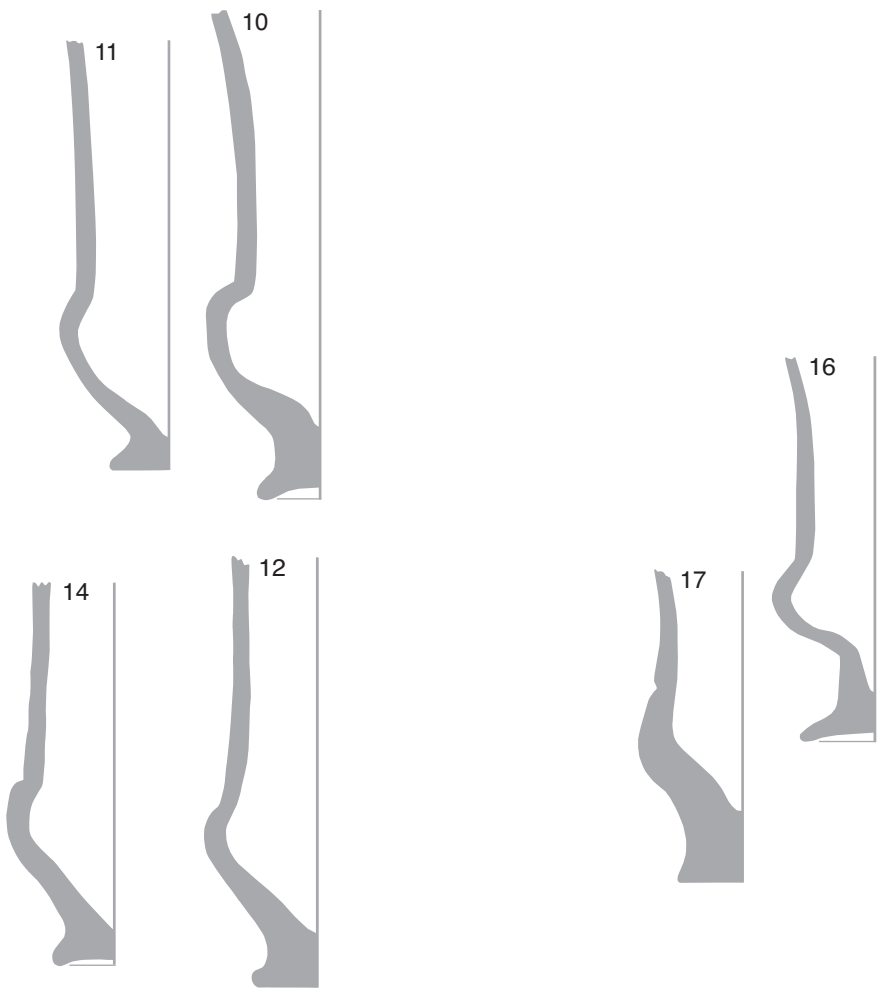



DIYALA SUSIANA GULF

# PLATE 97

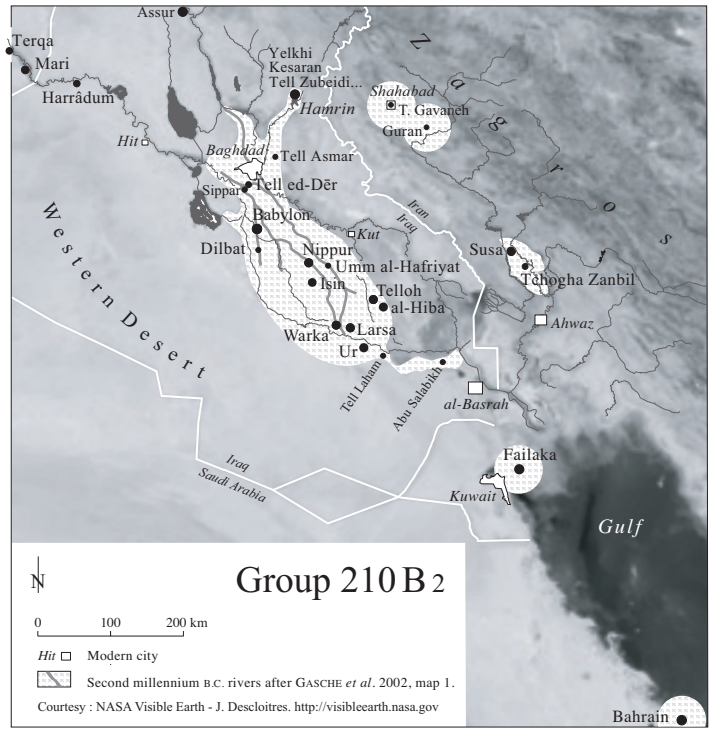
## 210 B 2

Continued from Pl. 96

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | N | 11 N 59 | WA 50*c* | [1] | greenish | ø rim : 69. Burial 3 dug from a layer removed in antiquity. *OIC* 22, fig. 70 : 7. *MHEM* 4, Pl. 3 : 11. |
| 2 | N | C 1453 | WB | II | buff | ø rim : 60. |
| 3 | I | IB 513 | *NA* I | *Schutt-halde* | *hellbraun* S : *hellgrünlich* | ø rim : -. *Isin* 1, 61, Pl. 28. |
| 4 | N | 14 N 153 | WC-1 | III | - | ø rim : 57. Burial 69 dug from III. *OIP* 111, Pls. 68 : m and 80 : f. |
| 5 | N | D 343 | WC-1 | III | buff S : cream | ø rim : -. *OIP* 111, Pl. 80 : a. |
| 6 | I | 0105 | Gula | 9,66m to 9,88m | *mittelbraun* S : *hellgrünlich* | ø rim : -. |
| 7 | N | 13 N 504 | WB | III | buff | ø rim : 64. *MHEM* 4, Pl. 3 : 14. |
| 8 | N | 13 N 527 | WB | III | light buff | ø rim : 70. |
| DIYALA | | | | | | |
| 9 | Zub | 80/30 | - | I | *rötlich* or *rötlichgelb* ! | ø rim : ± 74. *BaF* 7, 46, 48, Pl. 131 : 426. *MHEM* 4, Pl. 3 : 15. |
| 10 | Zub | 80/66 | - | I | - | ø rim : -. *BaF* 7, 48, Pl. 131 : 407. |
| 11 | Zub | - | - | I | - | ø rim : -. *BaF* 7, Pl. 131 : 416. |
| 12 | Zub | - | - | II | *rötlich* or *gelb* ! | ø rim : -. *BaF* 7, Pl. 109 : 86. |
| 13 | Zub | - | - | II | *rötlichgelb* | ø rim : -. *BaF* 7, Pl. 109 : 87. |
| 14 | Zub | - | - | II | - | ø rim : -. *BaF* 7, Pl. 109 : 86A. |
| SUSIANA | | | | | | |
| 15 | S | GS-4189 | A | XI *ancien* | *jaunâtre* | ø rim : 36. *MDP* 47, Pl. 19 : 2. |
| GULF | | | | | | |
| 16 | Fai | - | - | - | - | ø rim : -. HØJLUND 1987, fig. 368. Period 4B, see p. 109. |
| 17 | Bah | - | Exc. 428 | 8 | - | ø rim : -. HØJLUND 1987, fig. 695. Period IIIB = IIIb 2 (see HØJLUND and ANDERSEN 1997, 61). |

[1] No second millennium layers have survived in WA 50*c*. Therefore, Area WA 50*c* does not appear in Table 1.

C.P.U. = Chonological Position Uncertain




10 cm

(Photos at various scales)

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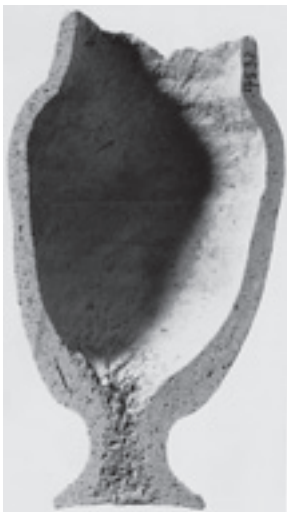
# 210 C 2

1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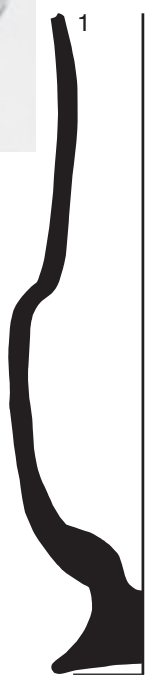
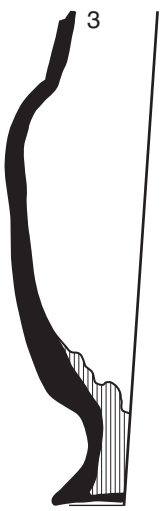
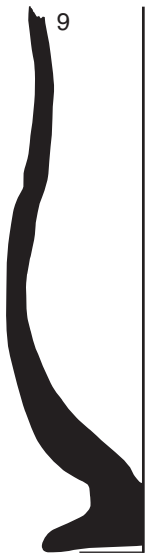
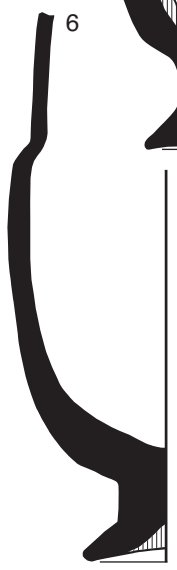

1

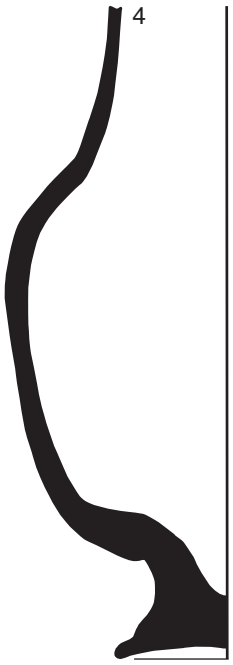
2


3


9

5


6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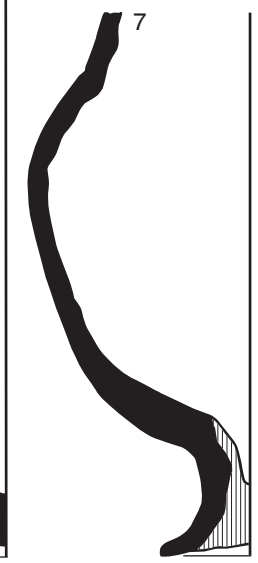
7

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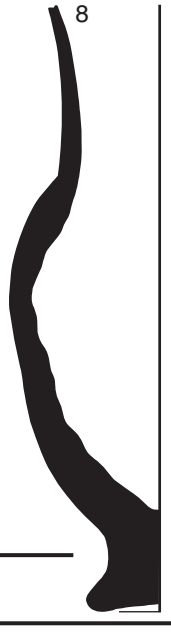
5

7


8

N. A. P. NORTHERN ALLUVIAL PLAIN S. A. P.

—1400

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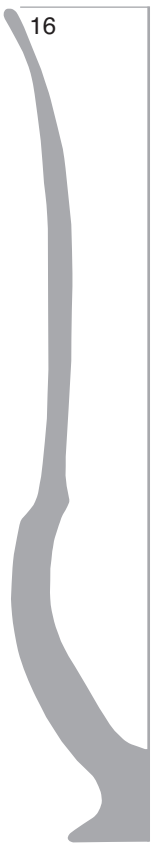
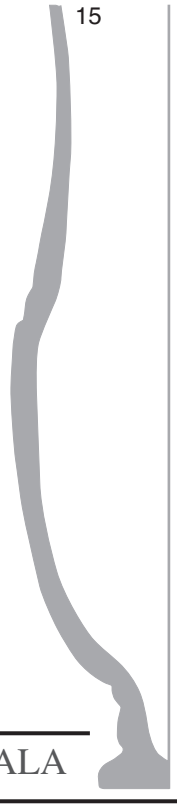
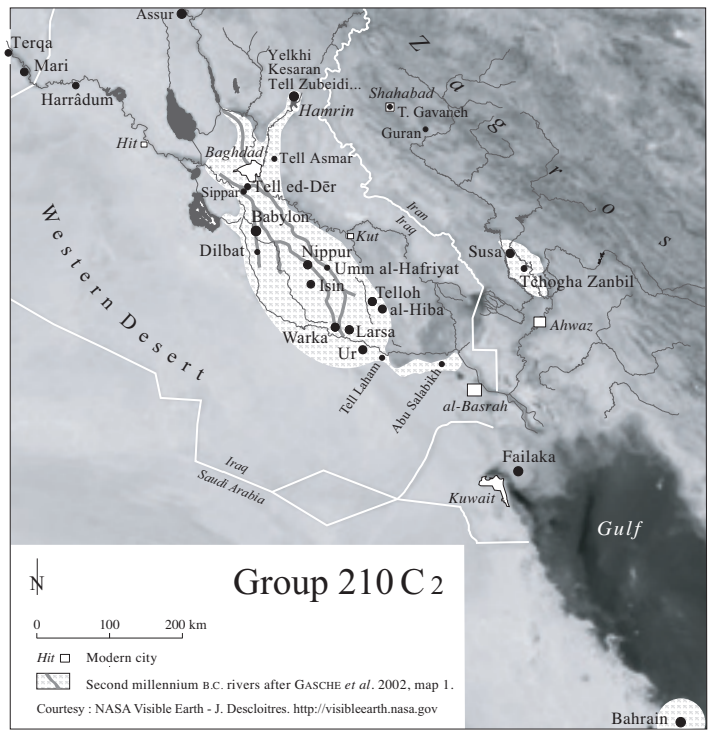
# PLATE 98

## 210 C 2





| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 103074 | E | 0 | 7.5YR 6/4 | ø rim : -. Pit 1 dug from Ensemble 0. |
| 2* | D | 107894 | F | 0 | 7.5YR 7/4 | ø rim : 78. Patched base. *NAPR* 6, Pl. 13 : 4 and *MHEM* 4, Pl. 3 : 2. |
| 3* | D | 107532 | E3 | 0 | 10YR 8/3 | ø rim : -. Filled-in base. |
| 4* | D | 103833 | E | 0 | 7.5YR 7/4 | ø rim : -. Pit 1 dug from Ensemble 0. |
| 5* | D | 107566 | E3 | 0 | 10YR 8/2 | ø rim : -. Filled-in base. Pit 1 dug from Ensemble 0. *NAPR* 6, Pl. 13 : 3. |
| 6* | D | 107607 | E3 | 0 | 7.5YR 8/4 | ø rim : -. Patched base. |
| 7* | D | 107530 | E3 | 0 | 5YR 7/3 | ø rim : -. Filled-in base. Pit 1 dug from Ensemble 0. *NAPR* 6, Pl. 13 : 5. |
| 8* | D | 107372 | E3 | Ia2 | 10YR 7/3 | ø rim : -. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 9 | N | C 1280 | WC-1 | II | orange | ø rim : -. *OIP* 111, Pl. 81 : b. |
| 10 | N | 13 N 420 | WB | II | pale green-buff | ø rim : 74. |
| 11 | N | 14 N 337 | WC-1 | III | - | ø rim : 74. *OIP* 111, Pl. 80 : j. *MHEM* 4, Pl. 3 : 12. |
| 12 | N | D 343 | WC-1 | III | buff<br>S : cream | ø rim : -. *OIP* 111, Pls. 69 : c and 80 : i. |
| DIYALA | | | | | | |
| 13 | Zub | 79/202 | - | I | - | ø rim : 75. *BaF* 7, 48, Pl. 131 : 411. |
| 14 | Iml | 78/10 | - | - | *rötlich*<br>S : *graugelbl.* | ø rim : -. *BaF* 7, 12, 15-16, Pl. 50 : 226. |
| 15 | Yel | HY 2 | A | Ib | *cuoio* | ø rim : -. VALTZ 2002-03, Pl. 151 : 3. |
| GULF | | | | | | |
| 16 | Bah | - | Exc. 428 | 8 | - | ø rim : 74. HØJLUND 1987, fig. 698. Period IIIB = IIIb 2 (see HØJLUND and ANDERSEN 1997, 61). |




10 cm

(Photos at various scales)

S. A. P. DIYALA GULF

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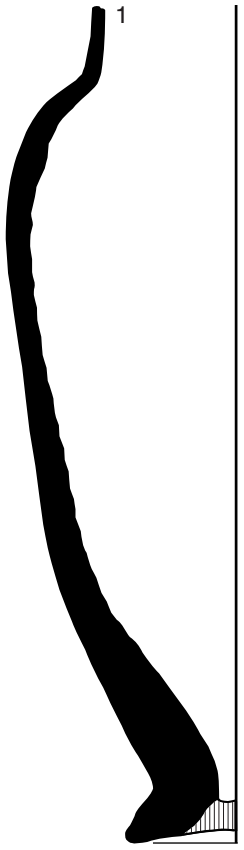
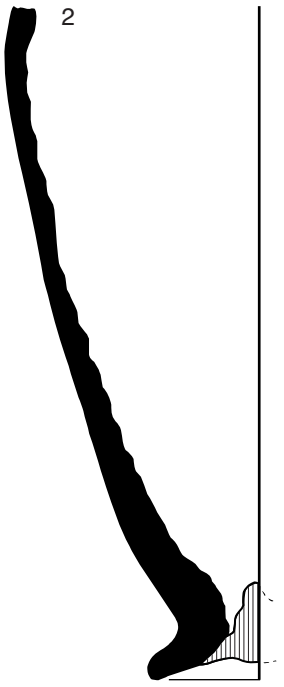
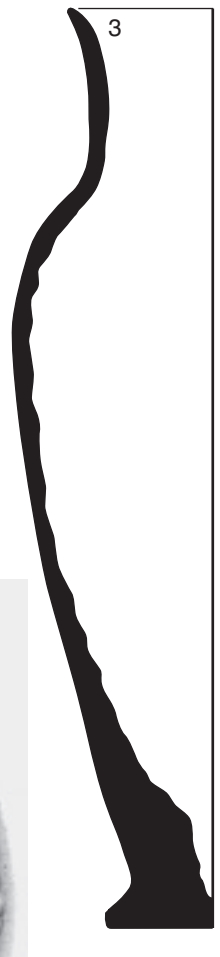
1

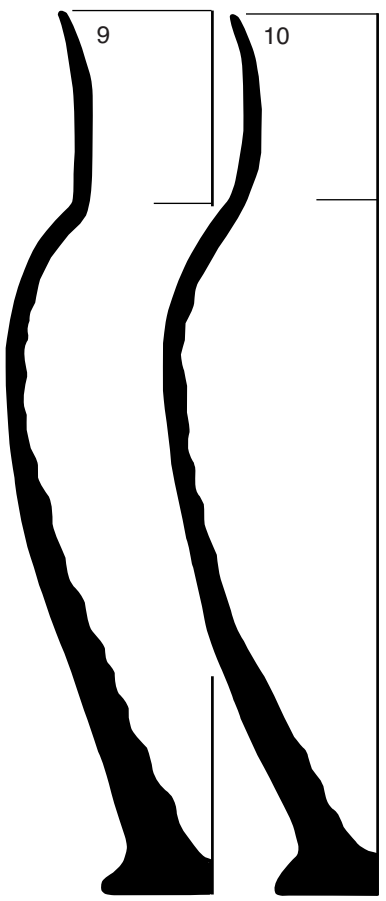


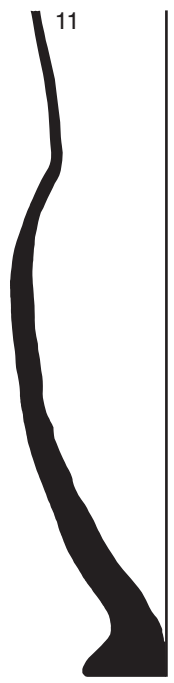



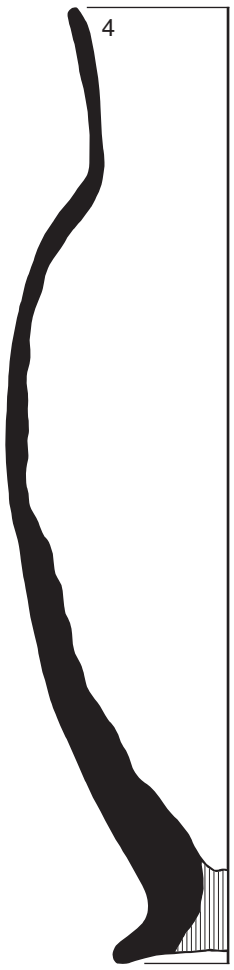
10

11




4

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NORTHERN ALLUVIAL PLAIN

SOUTHERN ALLUVIAL PLAIN

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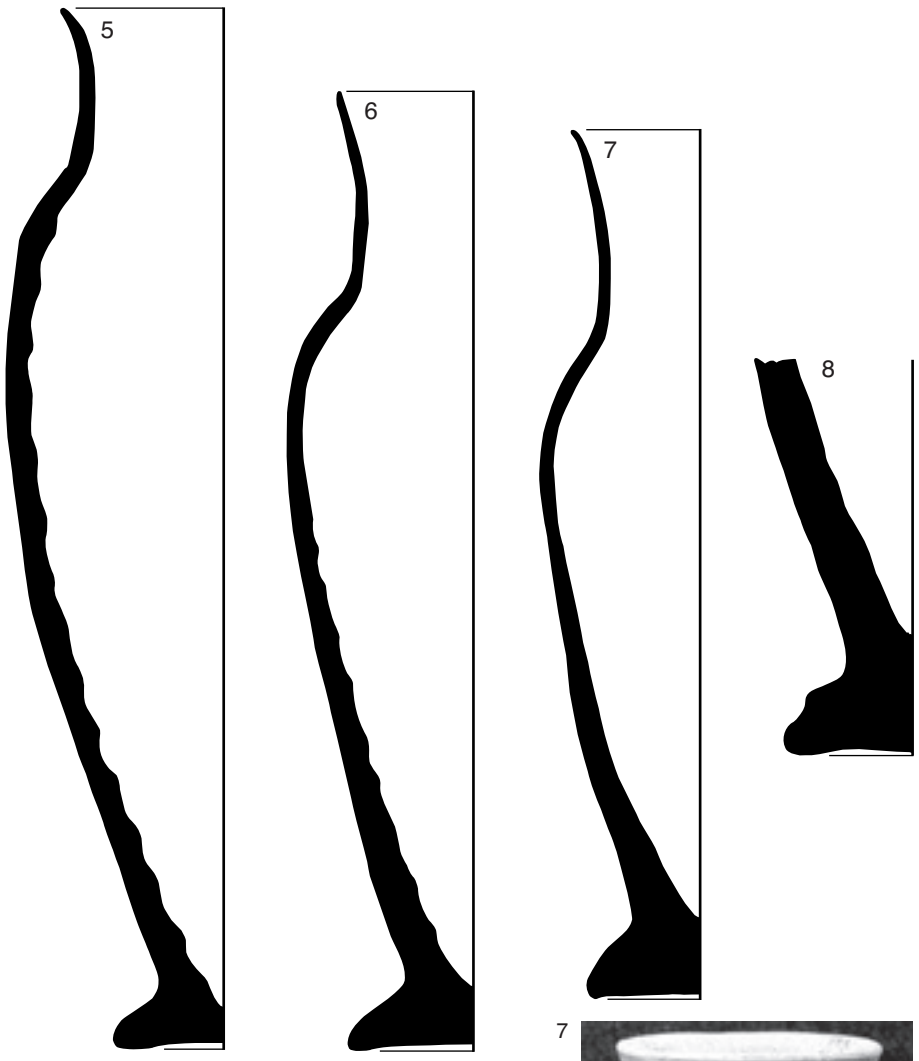
## 215 A 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 105691 | E3 | Ia1 | 7.5YR 7/4 | ø rim : -. Filled-in base. Burial D.384 dug from Ia1. *NAPR* 6, Pl. 10 : 2. |
| 2* | D | 109740 | E3 | Ia-c | 5YR 8/4 | ø rim : -. Plugged base. *MHEM* 4, Pl. 1 : 7. |
| 3 | Sip | 2815 | V/105 C4 | 3 | - | ø rim : 77. Burial 5 intrusive in Layer 3. *BaM* 36, 172, Pls. 11 : a, b and 25 : 2815. *Sumer* 52, figs. 11 and 25 : 2815. |
| 4* | D | 107958 | F | 0 | 2.5Y 8/2 | ø rim : 85. Filled-in base. Burial D.392 dug from Ensemble 0. *NAPR* 3, Pl. 5 : 3, *NAPR* 6, Pl. 10 : 1, and *MHEM* 4, Pl. 1 : 8. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 5 | N | 12 N 463 | WB | III | pinkish-buff | ø rim : 87. FRANKE 1978, fig. 66 : 1. *MHEM* 4, Pl. 1 : 22. |
| 6 | N | 13 N 501 | WB | III | - | ø rim : 75. |
| 7 | N | 13 N 495 | WB | III | buff | ø rim : 70. |
| 8 | N | - | WB | III | - | ø rim : -. FRANKE 1978, fig. 66 : 3. |
| 9 | N | 12 N 367 | WA | IVC | reddish-buff | ø rim : 82. GIBSON 1978, fig. 19 : 3. *MHEM* 4, Pl. 1 : 23. |
| 10 | N | 12 N 447 | WA | IVC | buff | ø rim : 80. GIBSON 1978, fig. 19 : 1. *MHEM* 4, Pl. 1 : 24. |
| 11 | N | 12 N 680 | WA | IVC | buff | ø rim : -. GIBSON 1978, 32. |

Continued on Pl. 100




6

7

10 cm

(Photos at various scales)

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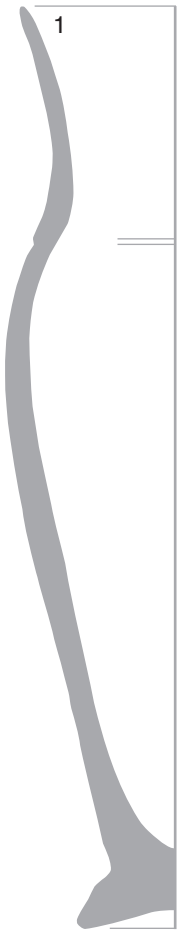
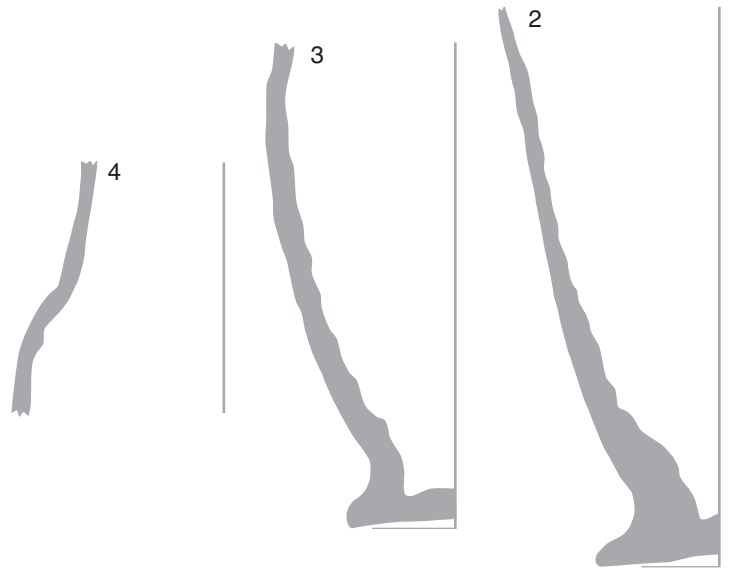
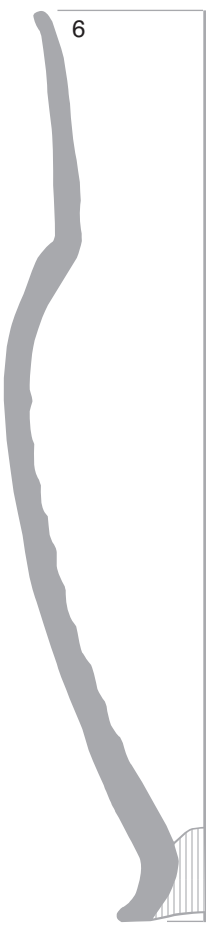
—1300




—1400




—1450

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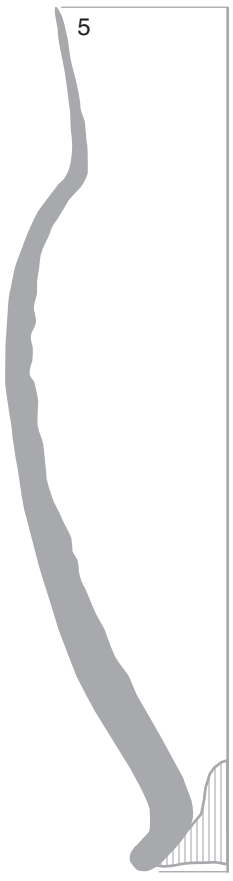
# PLATE 100

## 215 A 2

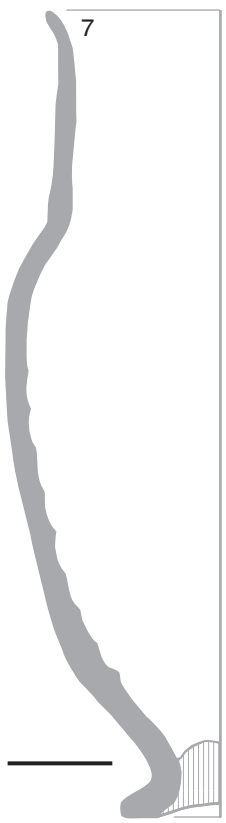
Continued from Pl. 99



5

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| DIYALA | | | | | | |
| 1 | Yel | HY 4 | A | Ia-b | *giallo-verdastro* | ø rim : 80. VALTZ 2002-03, Pl. 151 : 7. *MHEM* 4, Pl. 1 : 30. |
| GULF | | | | | | |
| 2 | Bah | - | Exc. 519 Bldg. I | between 5.00 & 6.00 | - | ø rim : -. HØJLUND and ANDERSEN 1997, fig. 188. Period IIIb 1. |
| 3 | Bah | - | Exc. 519 Bldg. I | between 5.00 & 6.00 | - | ø rim : -. HØJLUND and ANDERSEN 1997, fig. 187. Period IIIb 1. |
| 4 | Bah | - | Exc. 519 Bldg. I | between 5.00 & 6.00 | - | ø rim : -. HØJLUND and ANDERSEN 1997, fig. 199. Period IIIb 1. |
| SUSIANA | | | | | | |
| 5 | TZ | G. T.-Z. 985 | *Palais-Hypogée* | - | 2.5Y 8/2 | ø rim : 94. Plugged base. Burial IV. Louvre, Sb 5142. PONS 1991, 33-35, Pl. 12 : 3 = *MDP* 40, Pls. 41 : 6 (left) and 91. Redrawn by N. Pons. |
| 6 | S | GS-4788 | A | XI *ancien* | *jaunâtre* | ø rim : 90. Plugged base. *MDP* 47, Pl. 19 : 19. |
| 7 | S | GS-4990 | A | XII *récent* | *jaunâtre* | ø rim : 89. Plugged base. *MDP* 47, Pl. 19 : 22 and *MHEM* 4, Pl. 1 : 33. |

Continued on Pl. 101




5

10 cm

(Photos at various scales)

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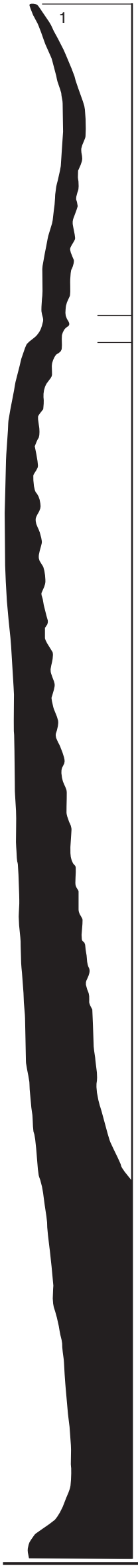
—1200

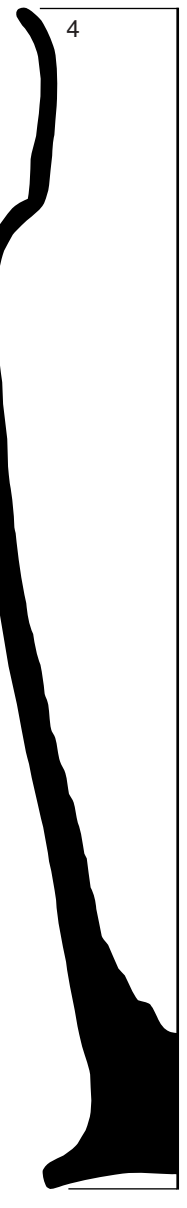
215 A 2


1

6

4

3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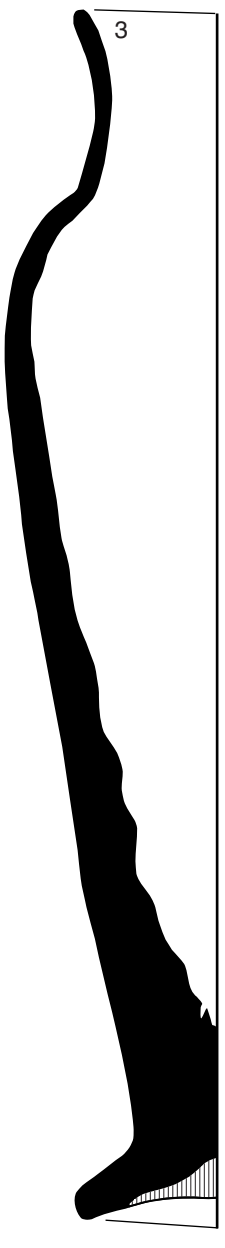
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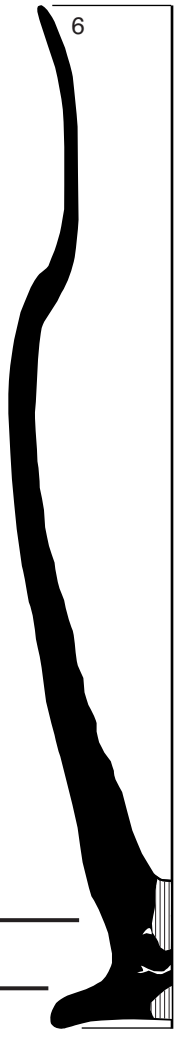
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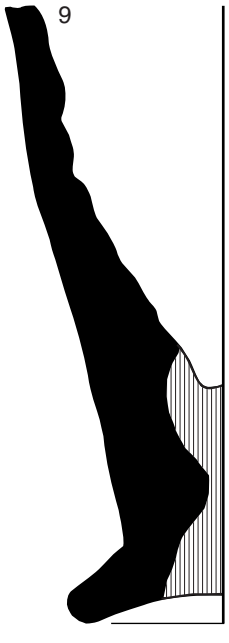
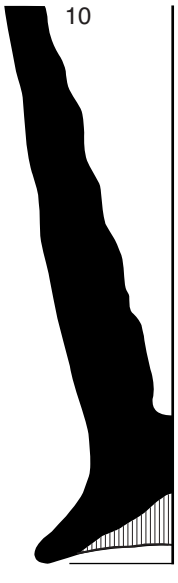

9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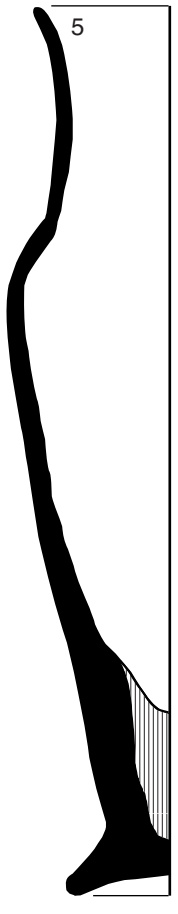
5





—1300

NORTHERN ALLUVIAL PLAIN

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# PLATE 101

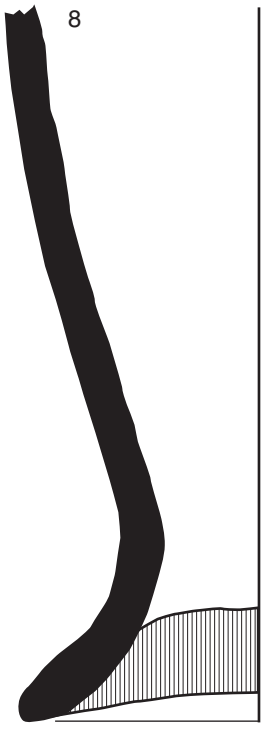
## 215 A 2

Continued from Pl. 100

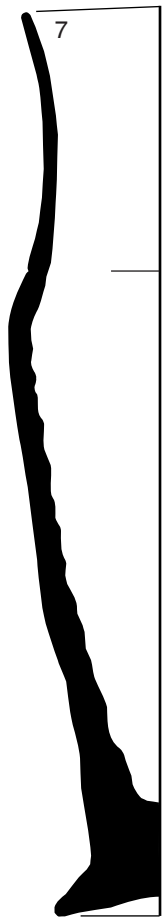
| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | AbS | - | Main Area | 2/B | - | ø rim : ± 83. JASIM *et al.* 2006, fig. 10 : 1 (scale approximate). |
| 2 | AbS | - | Main Area | 2/B | - | ø rim : ± 68. JASIM *et al.* 2006, fig. 10 : 2 (scale approximate). |
| 3* | D | 107501 | E3 | 0 | 10YR 8/2 | ø rim : 75. Patched base. *NAPR* 6, Pl. 11 : 2 and *MHEM* 4, Pl. 1 : 5. |
| 4* | D | 103809 | E | 0 | 5Y 8/2 | ø rim : 86. Pit 1 dug from Ensemble 0. |
| 5* | D | 107504 | E3 | 0 | 10YR 7/4 | ø rim : 70. Filled-in base. *NAPR* 6, Pl. 11 : 1 and *MHEM* 4, Pl. 1 : 4. |
| 6* | D | 105627 | E3 | Ia0 | 7.5YR 7/4 | ø rim : 70. Filled-in base. Burial D.383 dug from Ia, probably Sub-Phase 0. *NAPR* 6, Pl. 10 : 10. |
| 7 | Dey | 1 D 19 | B | I | 10YR 7/6 S : 5Y 8/2 | ø rim : 70. Burial 4 dug from I. |
| 8* | D | 107564 | E3 | 0 | 5Y 8/2 | ø rim : -. Plugged base. Pit 1 dug from Ensemble 0. *NAPR* 6, Pl. 11 : 5. |
| 9* | D | 107626 | E3 | 0 | 5Y 8/3 | ø rim : -. Filled-in base. Pit 1 dug from Ensemble 0. |
| 10* | D | 107555 | E3 | 0 | 2.5YR 7/4 | ø rim : -. Patched base. Pit 4 dug from Ensemble 0. Upper part of the sherd not shown. |

Continued on Pl. 102

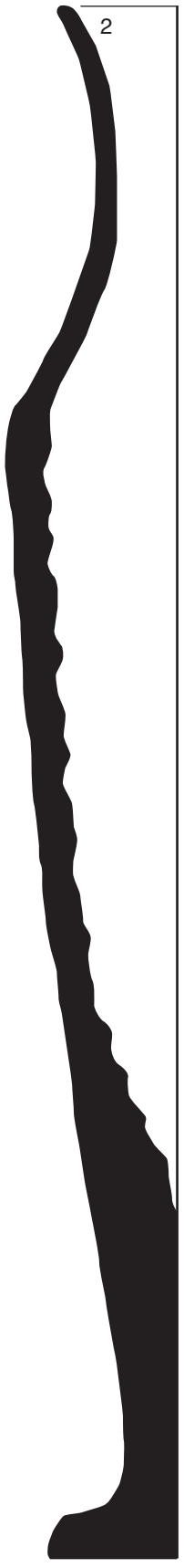
8



7



7



2

10 cm

(Photos at various scales)

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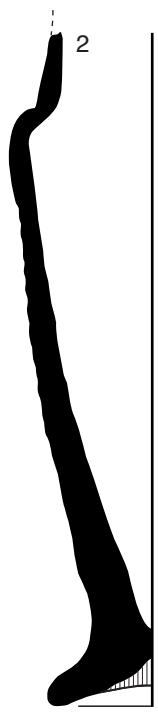
—1200

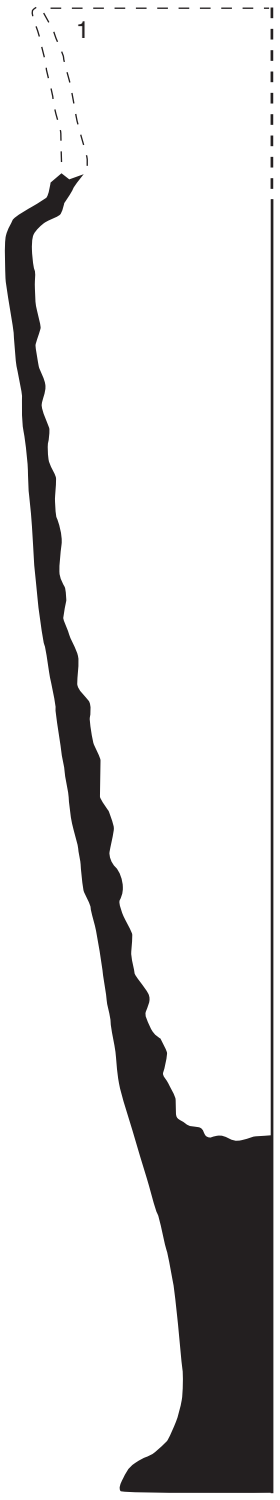
215 A 2

215 A 2

2

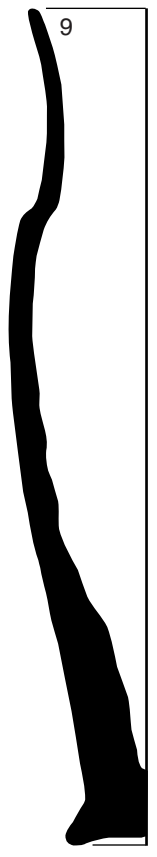


2

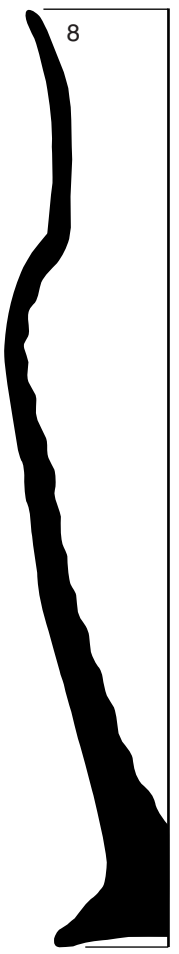


1

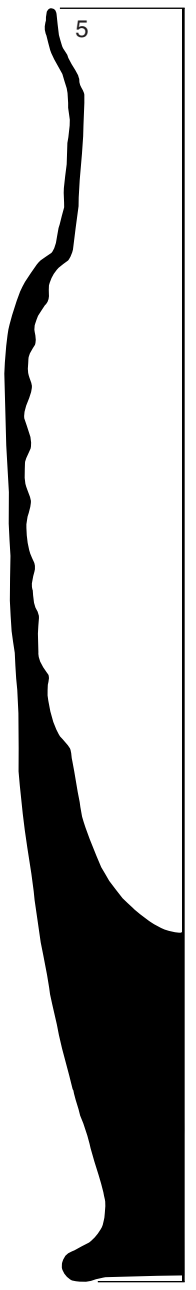
3



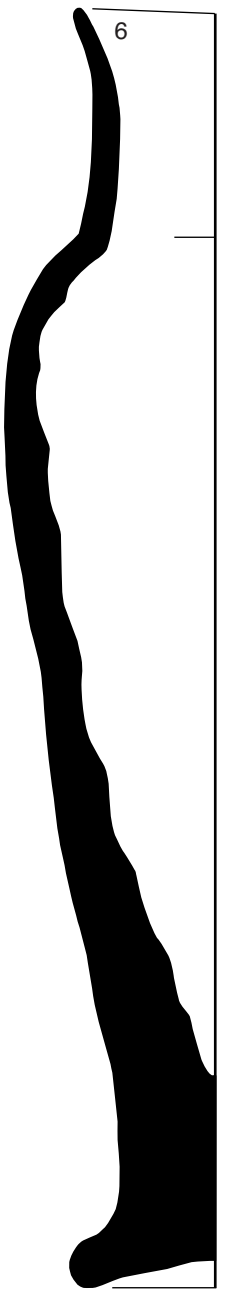
9



8



5



6

—1300

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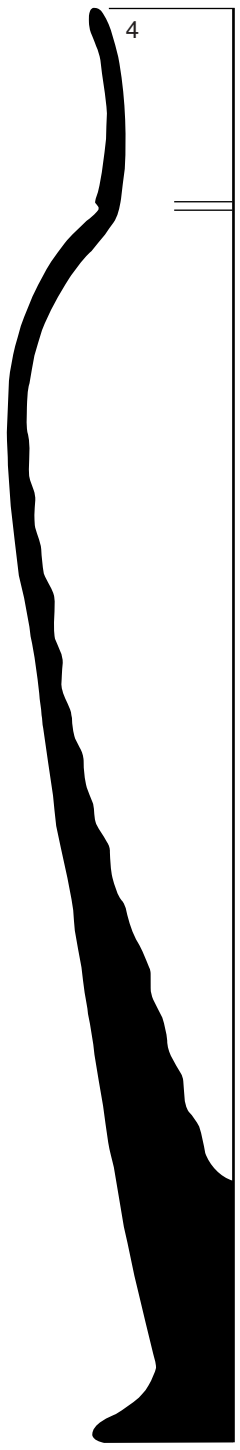
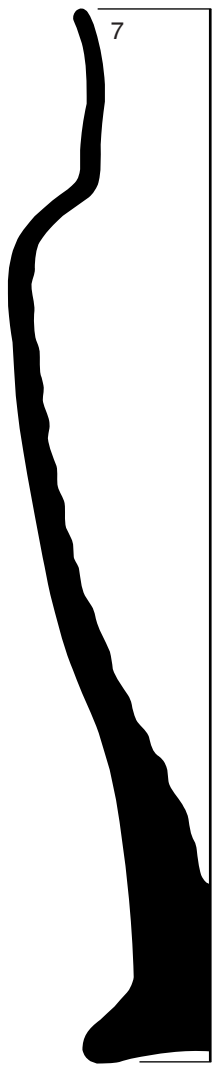
# PLATE 102

215 A 2

Continued from Pl. 101





| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | AbS | - | Main Area | 2/B | - | ø rim : -. JASIM *et al.* 2006, fig. 10 : 3 (scale approximate). |
| 2* | D | 107551 | E3 | 0 | 10YR 7/1 | ø rim : -. Patched base. Pit 4 dug from Ensemble 0. *NAPR* 6, Pl. 11 : 3. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 3 | W | 23438 | Qd 24-2 | +10,46m | *mattgrau bis graugrün* | ø rim : 70. Burial 80. *AUWE* 10, Pl. 44 : Grab 80a. |
| 4 | I | IB 753 | *NA* II | 8,50m | - | ø rim : 78. According to the expedition records, this vessel was found in the debris of Burial 53a, but it is not mentioned in the published description of this burial (cf. *Isin* 2, 42). |
| 5 | N | D 92 | WC-1 | II | buff | ø rim : 73. *OIP* 111, Pl. 79 : dd. |
| 6 | N | 17 N 76 | WC-3 | III | buff | ø rim : 75. |
| 7 | I | 0107 | *NA* II | 8,48m | - | ø rim : 73. |
| 8 | N | 18 N 55 | WF | V A | buff | ø rim : 75. Burial 9. *OIP* 129, Pl. 168 : 1. |
| 9 | N | 13 N 510 | WC-1 | III-II[1)] | orange S : cream | ø rim : 63. *OIP* 111, Pls. 69 : f and 79 : t. *MHEM* 4, Pl. 1 : 20. |

1) From a pit between Levels III and II.

C.P.U. = Chronological Position Uncertain

Continued on Pl. 103

10 cm

(Photos at various scales)

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215 A 2

C.P.U.

1

C.P.U.

2

3

4

5

—1200

1

6

—1300

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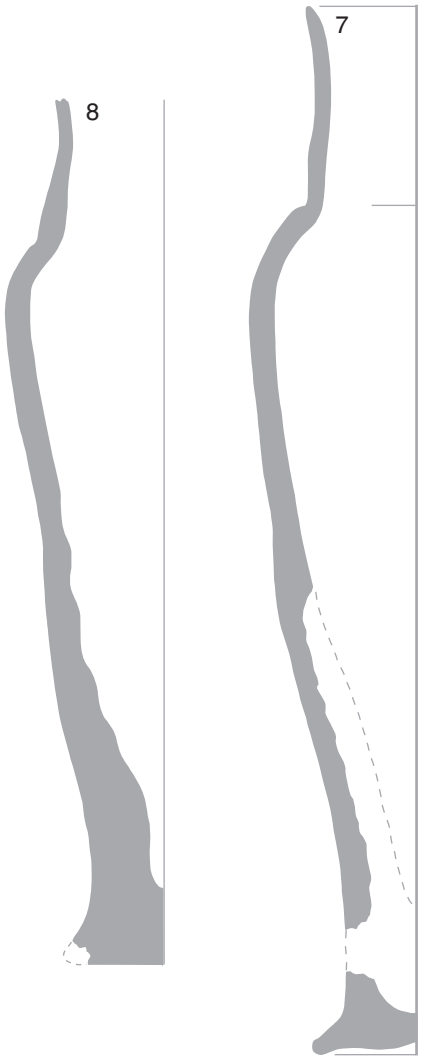




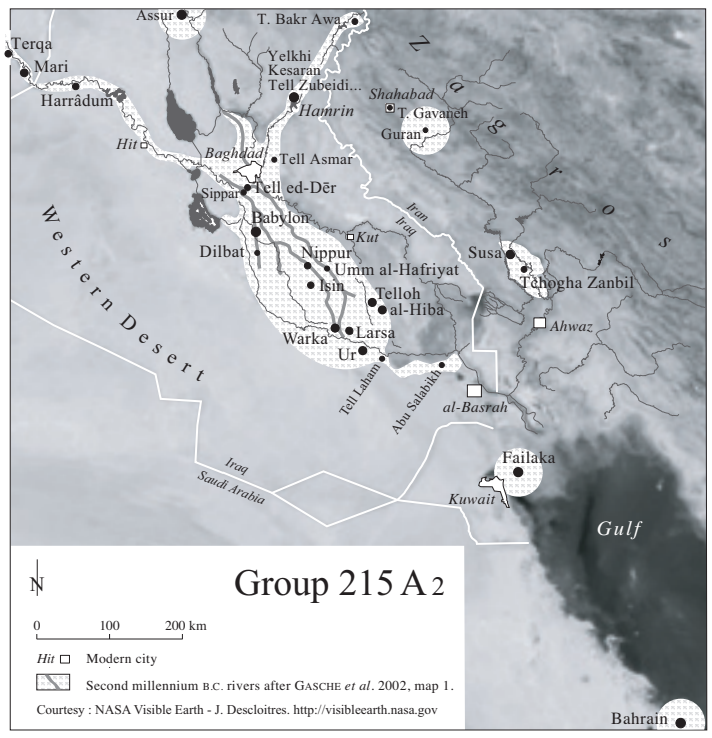

# PLATE 103

## 215 A 2

Continued from Pl. 102

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | L | L. 227 | - | - | 2.5Y 8/3 | ø rim : 69 Filled-in base visible on the bottom of the foot. Exc. Parrot, 1933. Louvre, AO 17039 = AO 24439. Drawn at the Louvre. PARDO 1979, Pl. 12 (numbered L.327?). |
| 2 | L | L. 226 | *N.E.* Q VII, b5 | - | 5Y 8/2 | ø rim : 70. Exc. Parrot, 1933. Louvre, AO 17038. Drawn at the Louvre. PARDO 1979, Pl. 28. Note neck and rim. Foot not shown. |
| 3 | N | G 470 | WC-3 | III | pink | ø rim : 70. |
| DIYALA | | | | | | |
| 4 | Zub | 79/262 | - | I | - | ø rim : 68. Burial 7 dug from I. *BaF* 7, 40, 47, Pl. 128 : 342. |
| 5 | Zub | 79/92 | - | I | - | ø rim : 77. *BaF* 7, 47, Pl. 129 : 354. |
| 6 | Zub | 79/223 | - | II | - | ø rim : ± 72. *BaF* 7, 47, Pl. 109 : 75. |
| GULF | | | | | | |
| 7 | Bah | - | Exc. 428 | 8 | - | ø rim : 58. HØJLUND 1987, fig. 694. Period IIIB = IIIb 2 (see HØJLUND and ANDERSEN 1997, 61). |
| 8 | Fai | - | - | - | - | ø rim : -. HØJLUND 1987, fig. 350. Periods 4A-B, see *id.* p. 109. |

C.P.U. = Chronological Position Uncertain




10 cm

(Photos at various scales)

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220 A 1

225 A 1

225 A 2

—1600

—1700

—1800

C.P.U.

1

2

3

4

5

6

8

11

S. A. P.

SOUTHERN ALLUVIAL PLAIN

S. A. P.

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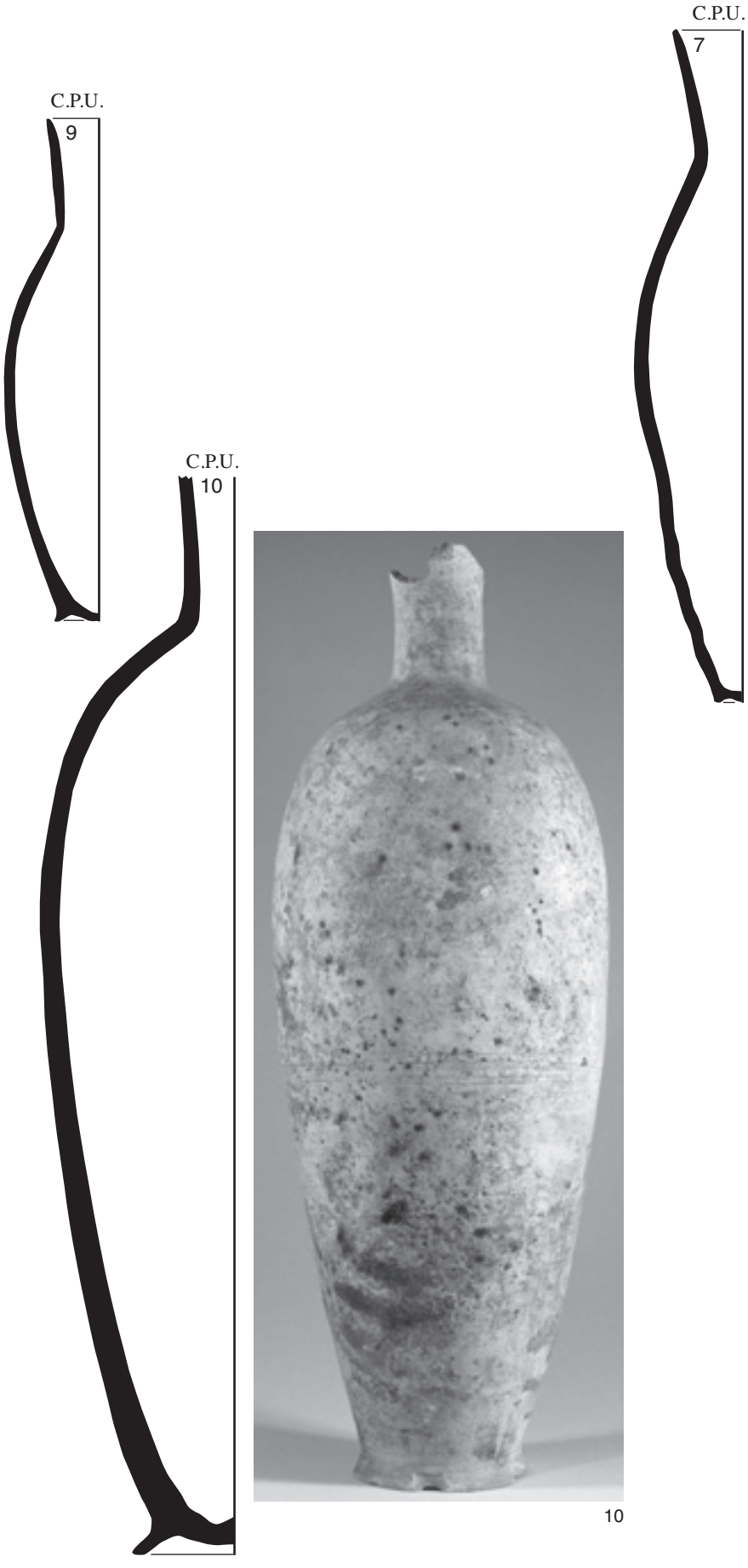
# PLATE 104

## 225 A 2




## 220 A 1

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | N | 3P 521 | TA | XIII | tan | ø rim : 41. *OIP* 78, Pl. 91 : 13. |
| 2 | N | 3P 526 | TA | XIII | tan | ø rim : 39. *OIP* 78, Pl. 91 : 12. |

## 225 A 1

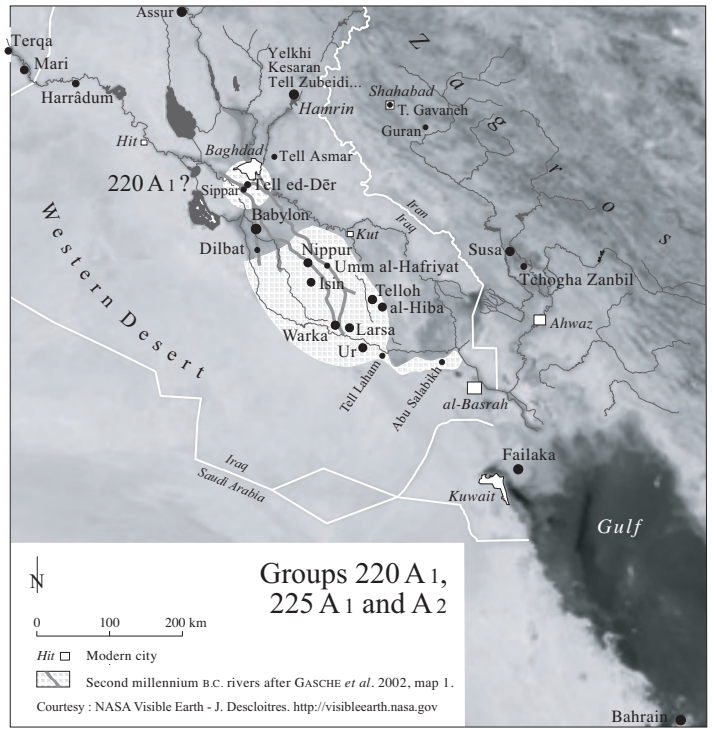
| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 3 | W | 19941 | Sînkāšid | 2a | *rot*<br>S : *hgelb* | ø rim : 36. Burial 51 (?), see *AUWE* 10, 23, Pl. 31 = VAN ESS 1988a, fig. 34 : 196 ; for another vessel from Stratigraphical Unit 5a, see p. 389 : 196A. |
| 4 | W | 19659 | Sînkāšid | 5a | *rot*<br>S : *hgelb* | ø rim : -. VAN ESS 1988a, fig. 33 : 190. |
| 5 | W | 20079 | Sînkāšid | 0 | *rot*<br>S : *hgelb* | ø rim : 36. VAN ESS 1988a, fig. 33 : 193. |

## 225 A 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 6 | I | 0237 | *NOA* I | 6,70m | 7.5YR 8/6<br>S : 7.5YR 8/4 | ø rim : 53. Burial 114. *Isin* 3, 73, *sub* 3[1)] and Pl. 8 : 2 for vessel *in situ*. |
| 7 | W | 21322,1 | Sînkāšid | 5 | *gelbgrün* | ø rim : 44. VAN ESS 1988a, fig. 33 : 194. |
| 8 | W | 19646a | Sînkāšid | 5a | *gelb* | ø rim : 40. VAN ESS 1988a, fig. 33 : 189. |
| 9 | W | 20694 | Sînkāšid | 0 | *gelbgrün* | ø rim : 32. VAN ESS 1988a, fig. 34 : 197 ; for another possible vessel from Stratigraphical Unit 5a, see p. 389 : 197A. |
| 10 | L | L. 390 | - | | 2.5Y 8/3 | ø rim : -. Burial 128. Exc. Parrot, 1933. Louvre, AO 24435. Drawn at the Louvre. PARDO 1979, Pl. 2. Photo Louvre. |
| 11 | N | 2P 427 | TB | III 1 | tan | ø rim : -. *OIP* 78, Pl. 92 : 3. |

1) In *Isin* 3, 73, *sub* 3 the burial is numbered 117. However, it is identified as No. 114 in the associated photo (Pl. 8 : 2) and in the expedition records.

C.P.U. = Chronological Position Uncertain




10 cm

(Photos at various scales)

SOUTHERN ALLUVIAL PLAIN

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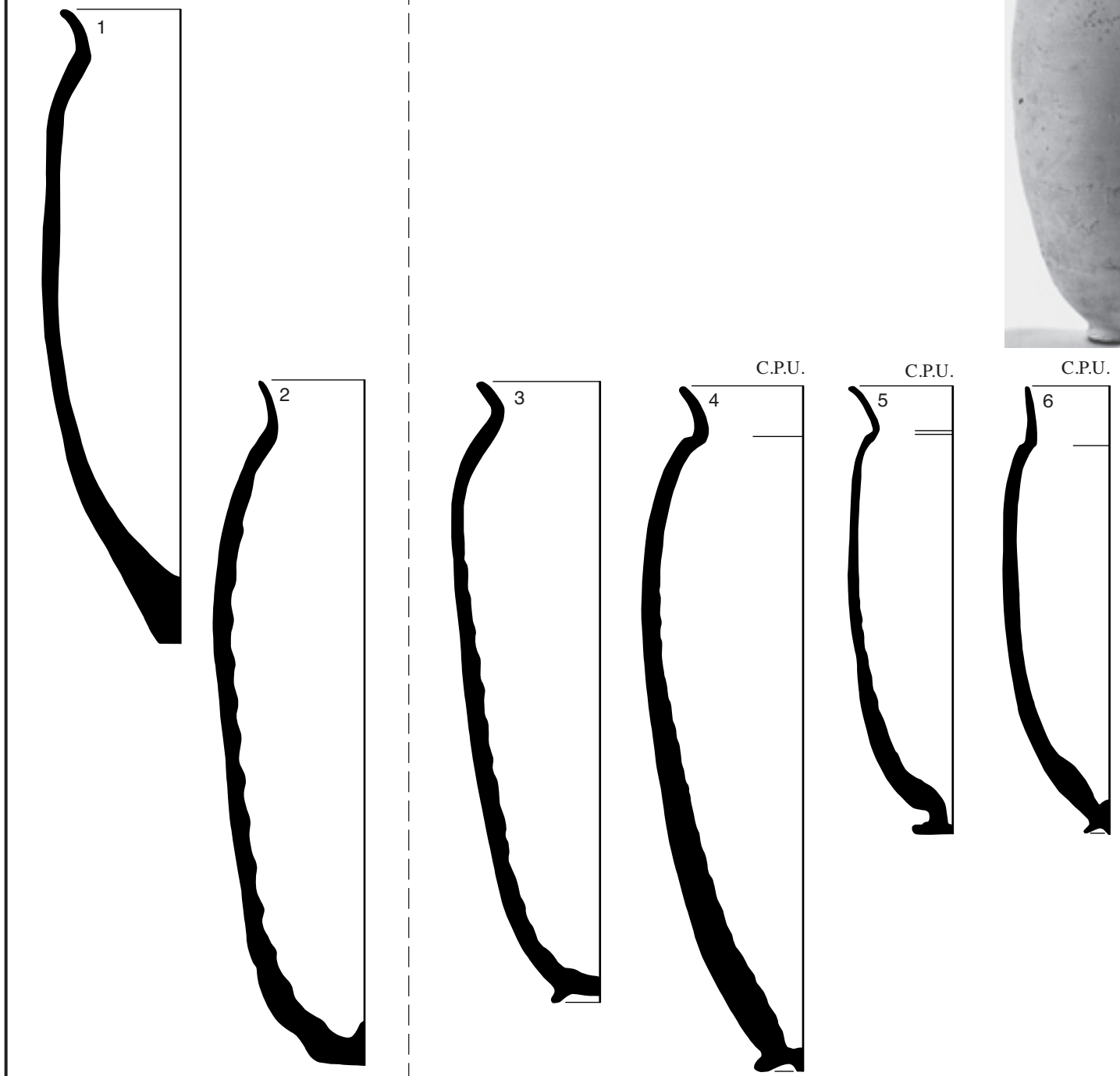
—1600

230 A 1

230 A 2




S. A. P.

SOUTHERN ALLUVIAL PLAIN

—1700

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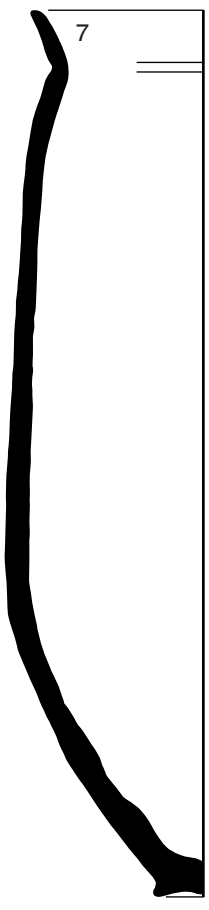
# PLATE 105

## 230 A 2

C.P.U.




## 230 A 1

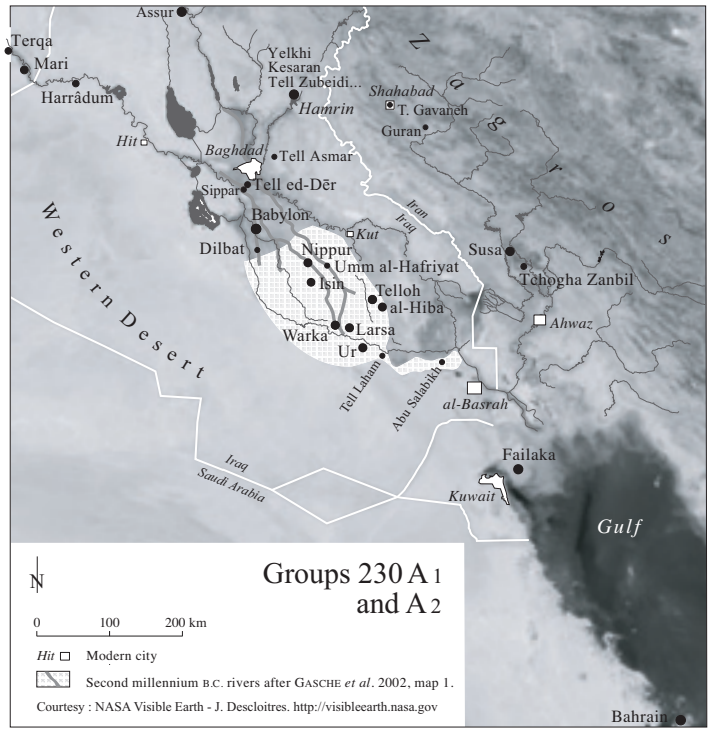
| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | N | 2P 58 | TB | I 1 | brownish S : buff | ø rim : 85. *OIP* 78, Pl. 96 : 5. |
| 2 | N | B 930 | WB | IV 2 | light buff | ø rim : 71. |

## 230 A 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 3 | N | 2P 408 | TB | I 2 | greenish-buff | ø rim : 81. Burial 1B 248 dug from I 2. *OIP* 78, Pl. 92 : 1. |
| 4 | L | L. 690 | *F.S.* | - 9 m | 2.5Y 8/2 | ø rim : 82. Exc. Parrot, 1967. Louvre, AO 22588. Drawn at the Louvre. |
| 5 | L | L. 388 ? | - | - | 10YR 8/3 | ø rim : 70. Burial 101. Exc. Parrot, 1933. Louvre, AO 17028. Drawn at the Louvre. |
| 6 | L | L. 410 | - | - | 2.5Y 8/2 | ø rim : 55. Exc. Parrot, 1933. Louvre, AO 17051. Drawn at the Louvre. |
| 7 | W | 20029p | Sînkāšid | 0 [1)] | - | ø rim : 88. Disturbed Burial 50, under Room 16 of the palace. *AUWE* 10, Pl. 29 : p = VAN ESS 1988a, fig. 30 : 177. Redrawn from *UVB* 18, Pl. 24 : a. |

1) Although found in the context of Burial 50, VAN ESS (1988a, cf. p. 329, *sub* 16, col. 5) does not mention this vessel in the inventory of this grave. See also Pl. 8, note 2).

C.P.U. = Chronological Position Uncertain




10 cm

(Photos at various scales)

SOUTHERN ALLUVIAL PLAIN

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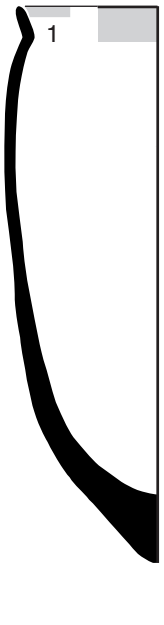
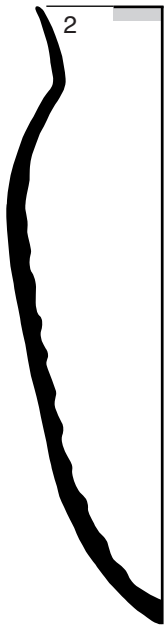
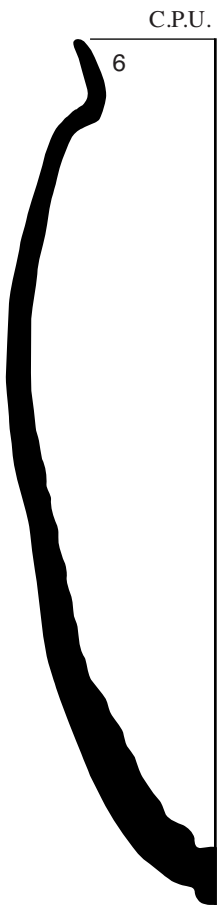
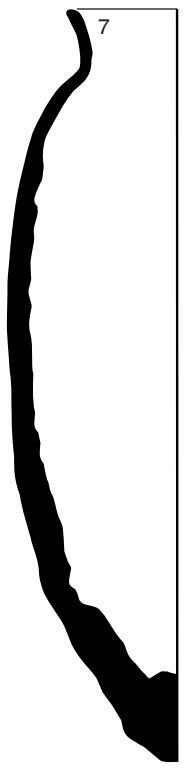
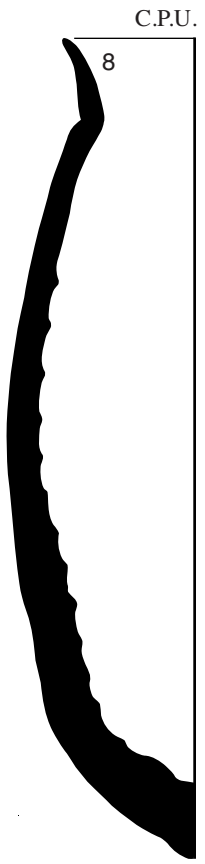
# 230 A 3 & 4

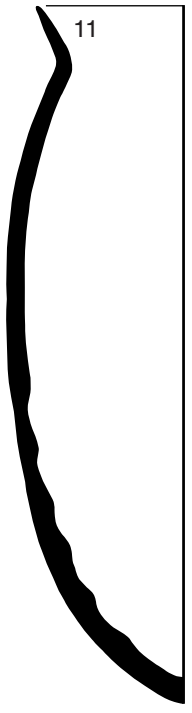






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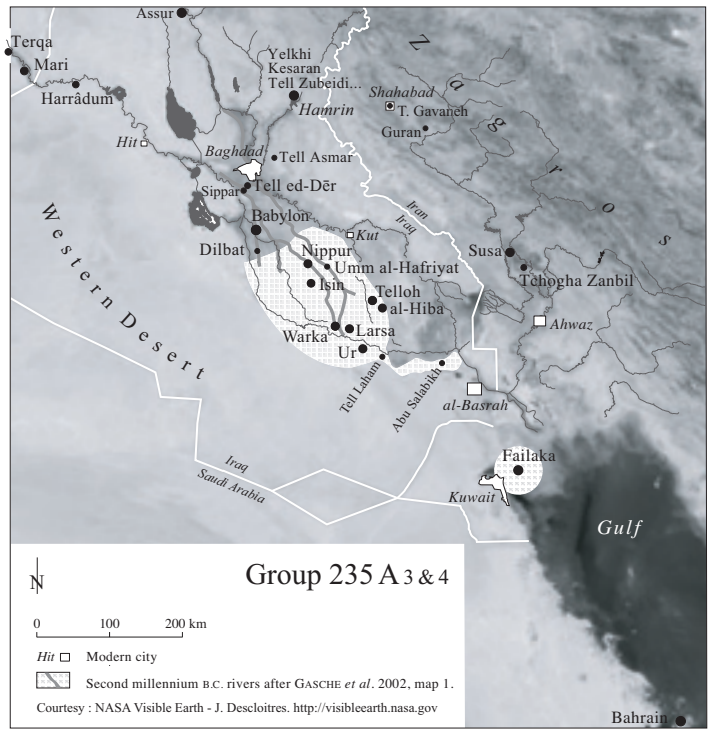
# PLATE 106

## 230 A 3 & 4

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | N | 2N 914 | TB | E | tan<br>S : buff | ø rim : 74. *OIP* 78, Pl. 96 : 10. Painted band on interior and exterior of rim |
| 2 | N | 12 N 628 | WB | IV 5 | buff | ø rim : 66. FRANKE 1978, fig. 60 : 8. Painted band on exterior of rim. |
| 3 | I | 0220 | *NOA* III | 6,04m | 5Y 7/3 | ø rim : 67. |
| 4 | N | 3P 406 | TA | X | tan<br>S : buff | ø rim : 68. *OIP* 78, Pl. 96 : 7. Painted decoration not shown. |
| 5 | N | 3P 411 | TA | X | tan<br>S : buff | ø rim : 71. *OIP* 78, Pl. 96 : 8. |
| 6 | L | - | | | 5Y 7/3 | ø rim : 68. Exc. Parrot, 1933. Louvre, AO 17047. Drawn at the Louvre. |
| 7* | L | 27.572 | *Mais.* 27 | - | 10YR 8/4 | ø rim : 67. Exc. Huot. Redrawn. |
| 8 | L | L. 698 | *F.S.* | - 7,10 m | - | ø rim : 70. Exc. Parrot, 1967. PARROT 1968, fig. 16 : left ( = CALVET *et al.* 2003, fig. 32 : b). The same id. no. was given to our Pl. 57 : 9 |
| 9* | L | 59.24 | *Mais.* 59 | *Sols* | 5YR 7/4 | ø rim : 66. Exc. Huot. CALVET 2003, fig. 70. Redrawn. |
| 10 | L | | - | - | 7.5YR 8/4 | ø rim : 52. Exc. Parrot, 1933 ?. Louvre, AO 24427. Drawn at the Louvre. PARDO 1979, Pl. 36. |
| 11 | N | 12 N 426 | WB | IV 1 | pinkish-buff<br>S : cream | ø rim : 74. FRANKE 1978, 90. |

C.P.U. = Chronological Position Uncertain

9




10 cm

(Photos at various scales)

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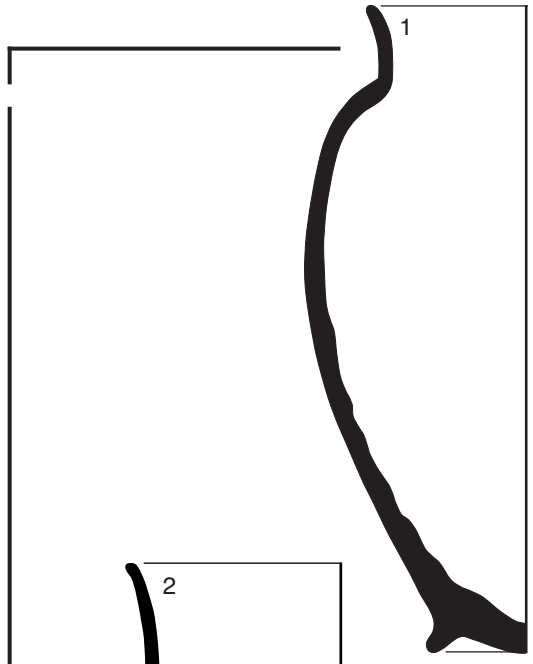
235 A 2

—1550

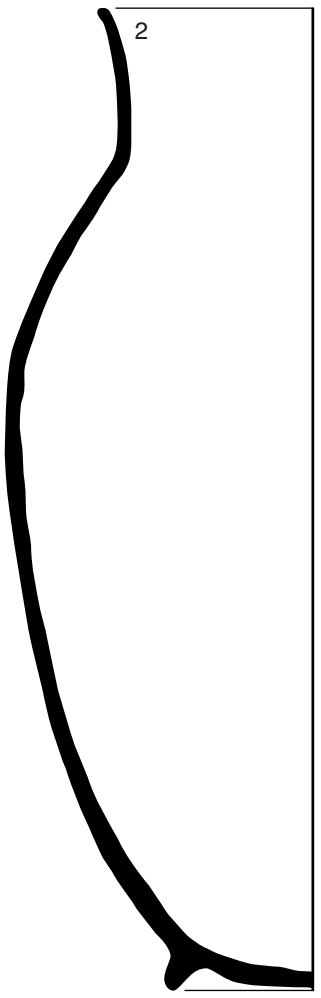
—1600

—1700

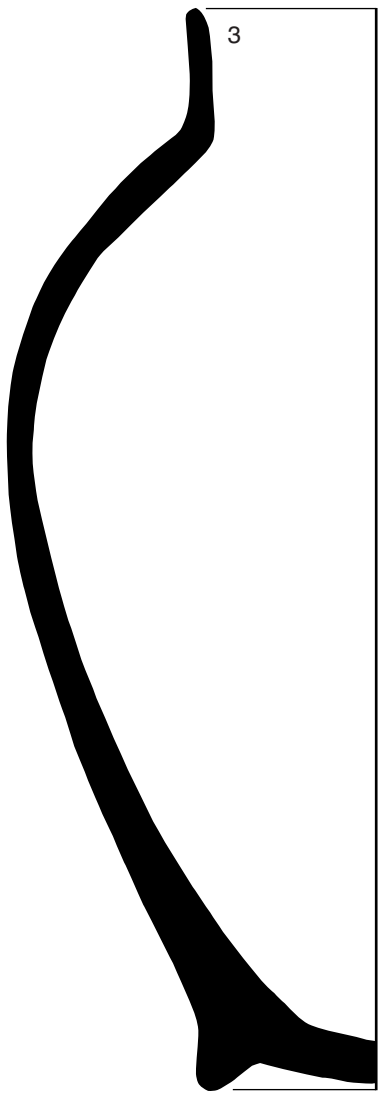
—1800

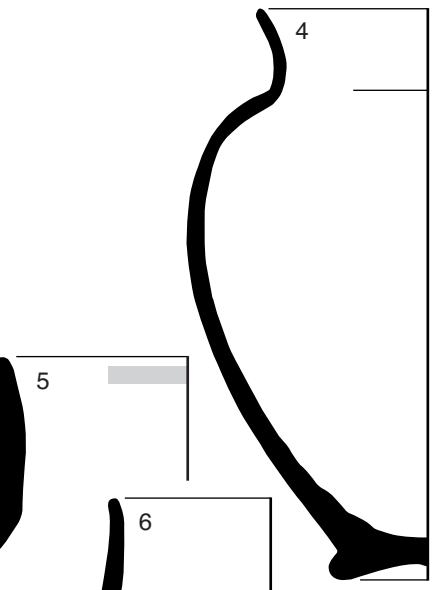


1



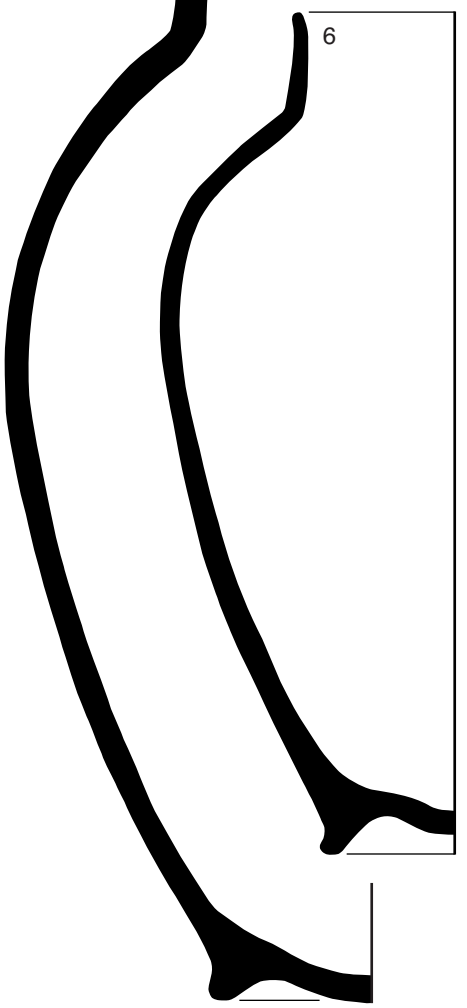
2










N. A. P.

SOUTHERN ALLUVIAL PLAIN

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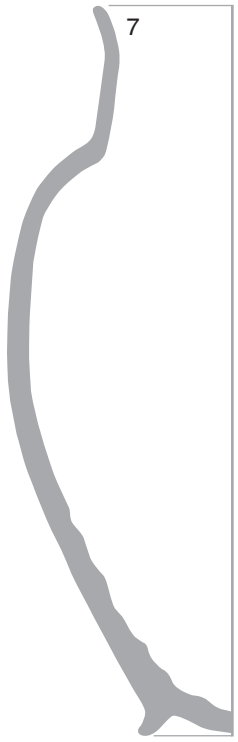
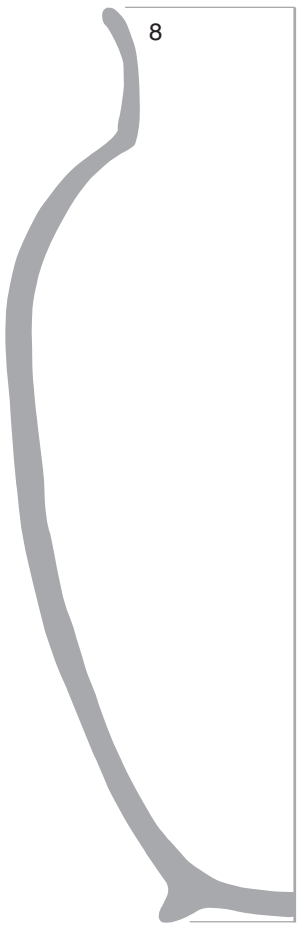
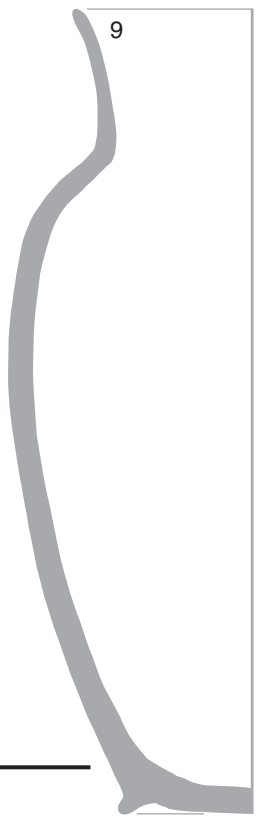
235 A 2

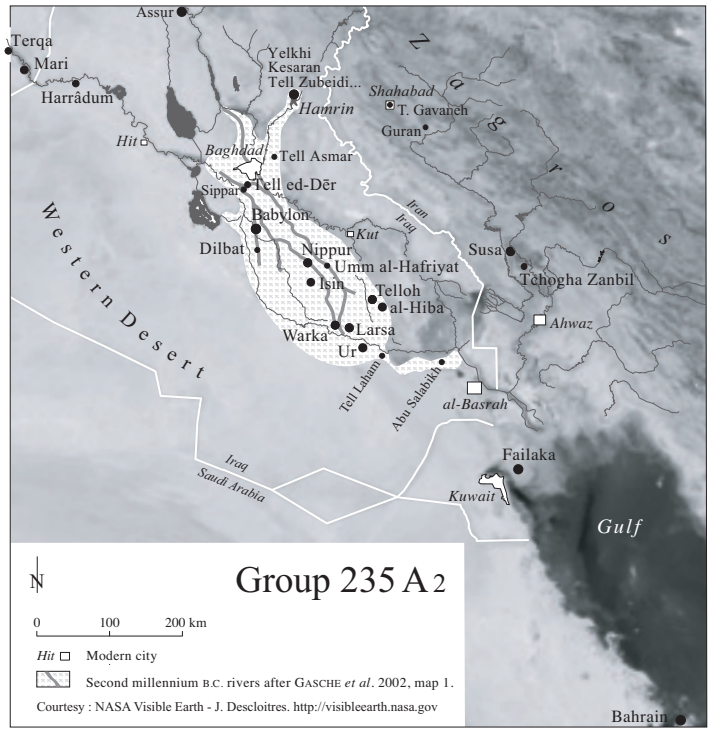



DIYALA

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | D | 103682 | E | IIId | 7.5YR 7/4 | ø rim : 90. Burial D.226 dug from IIId. *MHEM* 1, Pls. 22 and 35 : 18. |
| 2 | D | 101716 | A | Ie | 5YR 7/6 | ø rim : 112. Burial D.58 dug from Ie. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 3 | N | 2P 396 | TB | I | greenish-brown | ø rim : 100. Burial 1B 247 intrusive in Level II. *OIP* 78, Pl. 90 : 15. |
| 4 | N | 3P 482 | TA | XI 1 | tan | ø rim : 92. *OIP* 78, Pl. 94 : 18. |
| 5 | N | 11 N 186 | WA | V | grayish buff | ø rim : 105. *OIC* 22, fig. 32 : 1. Painted band on exterior of rim. |
| 6 | I | IB 1250a | *SOA* | 6,88m to 6,98m | *gelblich* | ø rim : 87. *Isin* 2, 86, Pl. 31 : 15. |
| DIYALA | | | | | | |
| 7 | Ish | P. 28 | Kititum | IV | - | ø rim : 74. *OIP* 63, Pl. 184 : C.547.320. |
| 8 | Yel | HY 341/1 | B | Va | *cuoio rosato* | ø rim : 99. Burial 28. GABUTTI 2002-03, Pl. 91 : 1. |
| 9 | Yel | HY 462/1 | B | Vb-c | *rossastro* | ø rim : 95. Burial 206. GABUTTI 2002-03, Pl. 91 : 5. |




10 cm

(Photos at various scales)

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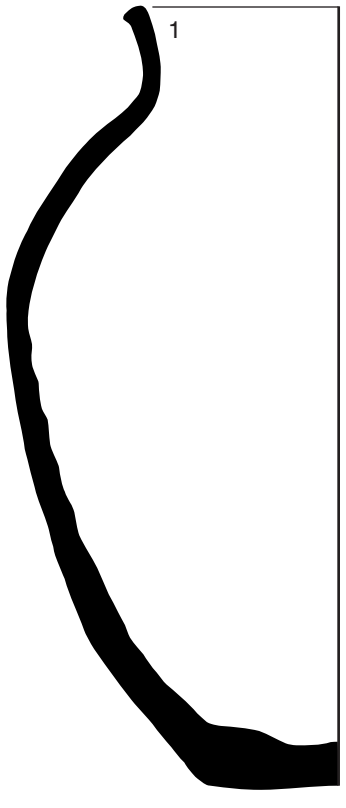
240 A 1

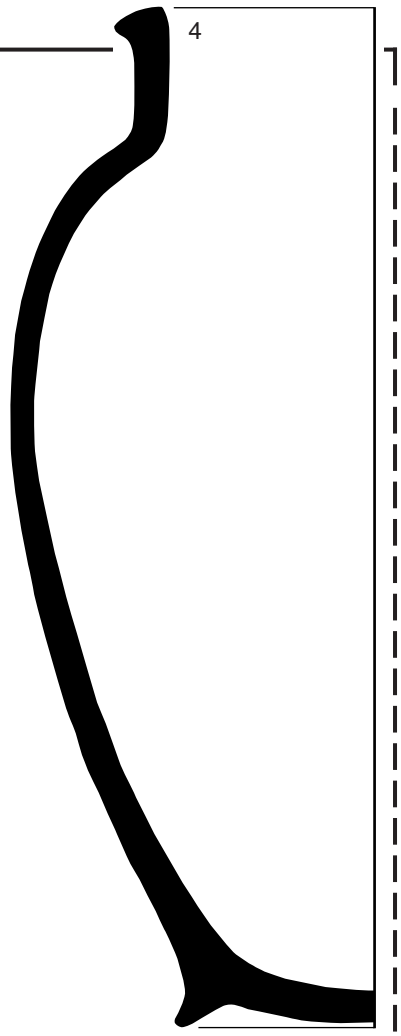
240 A 2

1

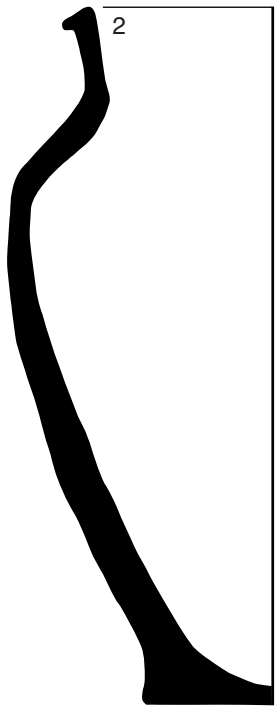


1

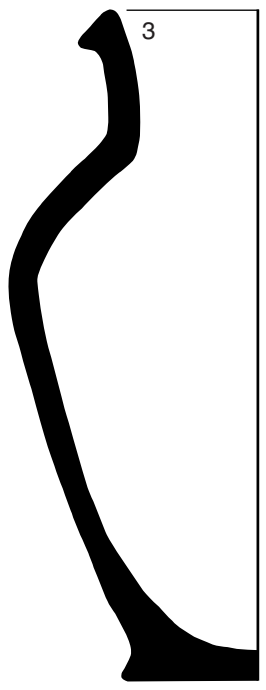
4



4



2



3

3

N. A. P.

S. A. P.

N. A. P.

—1700

—1800

—1900

—2000

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# PLATE 108

## 240 B 2

## 240 A 1

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | D | 104172 | A | IIIb | 5YR 7/3 | ø rim : 114. Burial D.270B dug from IIIb. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 2 | U | 1 UmH 176 | A | II | 10YR 8/4 | ø rim : 110. Burial 13 dug from II. |
| 3 | U | 1 UmH 213 | A | II | 10YR 7/4 | ø rim : 92. Burial 18 dug from II. |

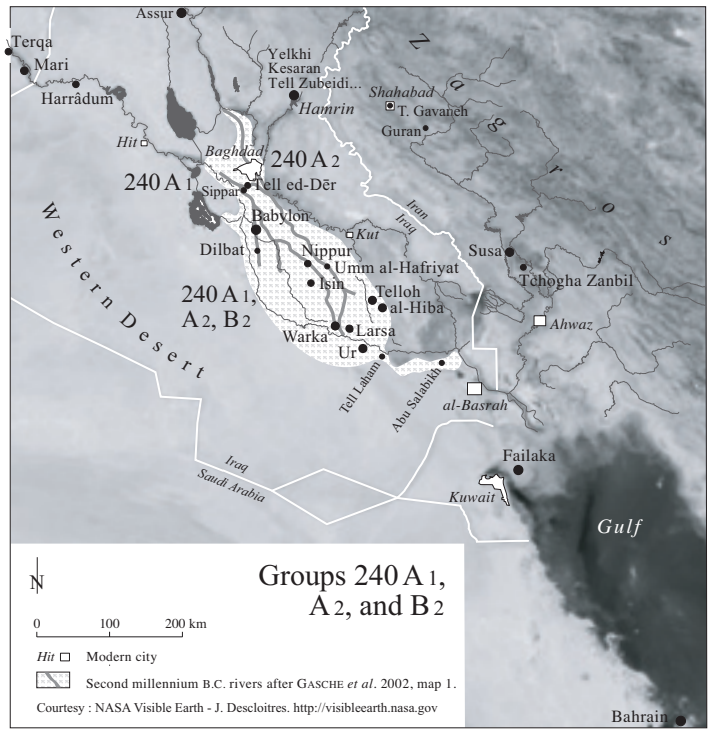
## 240 A 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 4 | D | 102630 | A | Ig | 2.5Y 8/2 | ø rim : 133. Burial D.153A dug from Ig. |

## 240 B 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 5 | W | 25068 | P 6 *Areal* 2 | 3 | *beige* | ø rim : 106. Burial 13A. *AUWE* 10, Pl. 9 : d = VAN ESS 1993, fig. 15 : 179. |
| 6 | W | 25076 | P 6 *Areal* 2 | 3 | *rötlich-beige* S : *weisslich* | ø rim : 114. Burial 13A. *AUWE* 10, Pl. 9 : e = VAN ESS 1993, fig. 15 : 180. |
| 7 | I | IB 296 | *SA* | ±1m below surface | *hellbraun* | ø rim : 105. *Isin* 1, 58, Pl. 26. |

Continued on Pl. 109




10 cm

(Photos at various scales)

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240 B 2

240 C 2 & 3

2

C.P.U.

2

C.P.U.

1

—1900

3

4

4

5

—2000

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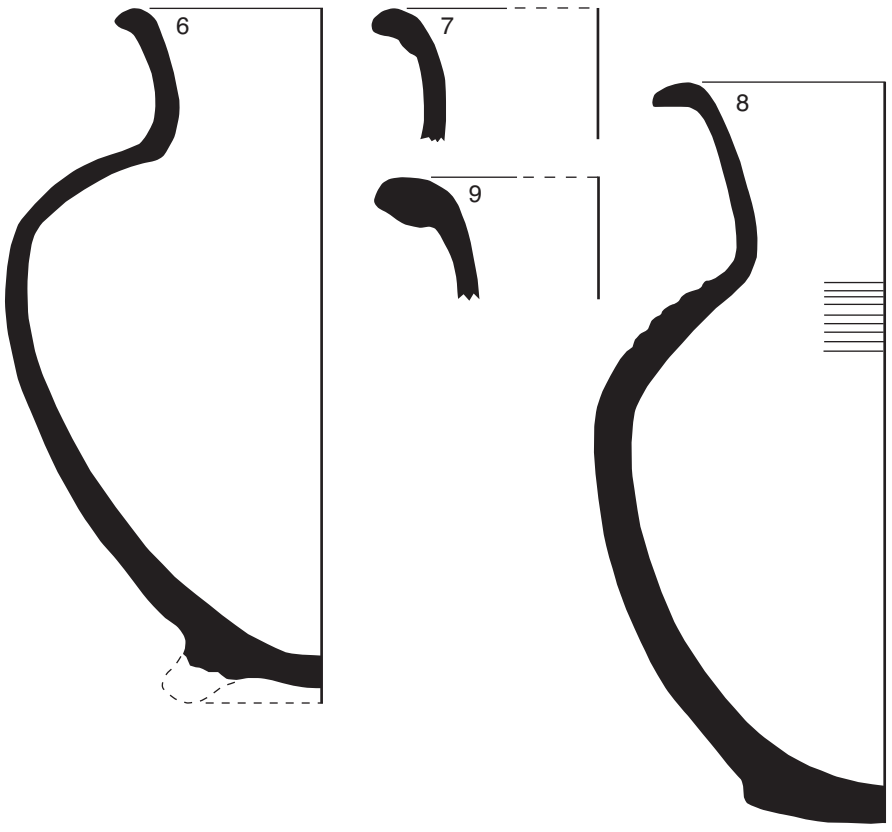
# 240 C 2 & 3




SOUTHERN ALLUVIAL PLAIN



## 240 B 2

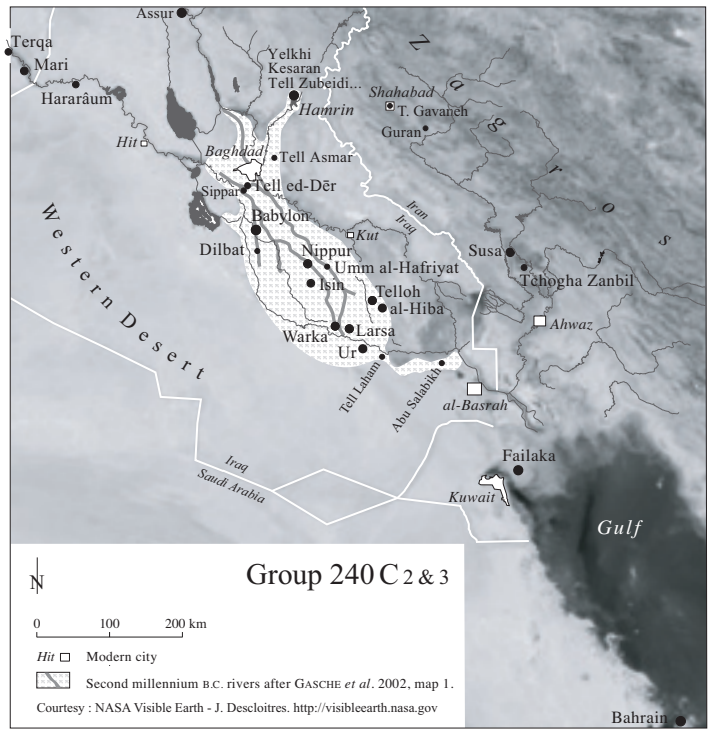
Continued from Pl. 108

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | Ur | - | AH | - | - | ø rim : 95. Burial LG/67. WOOLLEY & MALLOWAN 1976, 192, 201, Pl. 110 : 99. |
| 2 | L | L. 190 | - | - | 10YR 8/2 | ø rim : 131. Burial 46. Exc. Parrot, 1933. Louvre, AO 24433. Drawn at the Louvre. PARDO 1979, Pl. 35. Photo Louvre. |

## 240 C 2 & 3

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 3* | D | 104177 | A | IIId | 5YR 7/3 | ø rim : 80. *TD* 4, 52, Pl. 10 : 14. |
| 4* | D | 102543 | A | IVb | 10YR 7/3 | ø rim : -. *TD* 4, 53, Pl. 9 : 1. |
| 5* | D | 102709 | A | IVb | 10YR 7/2 | ø rim : 140. *TD* 4, Pl. 8 : 9. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 6 | N | 17 N 71 | WC-3 | VB | pink | ø rim : 111. Burial 104 dug from VB. |
| 7 | N | D 9 | WC-3 | VB | buff | ø rim : 120. |
| 8 | N | 3P 358 | TB | VIII | buff | ø rim : 125. *OIP* 78, Pl. 85 : 16. |
| 9 | N | D 630 | WC-3 | VC | pink<br>S : cream | ø rim : 120. |

C.P.U. = Chronological Position Uncertain




10 cm

(Photos at various scales)

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245 A 2

250 A 1

250 A 2

1700

1800

1900

1

N. A. P.

S. A. P.

S. A. P.

N. A. P.

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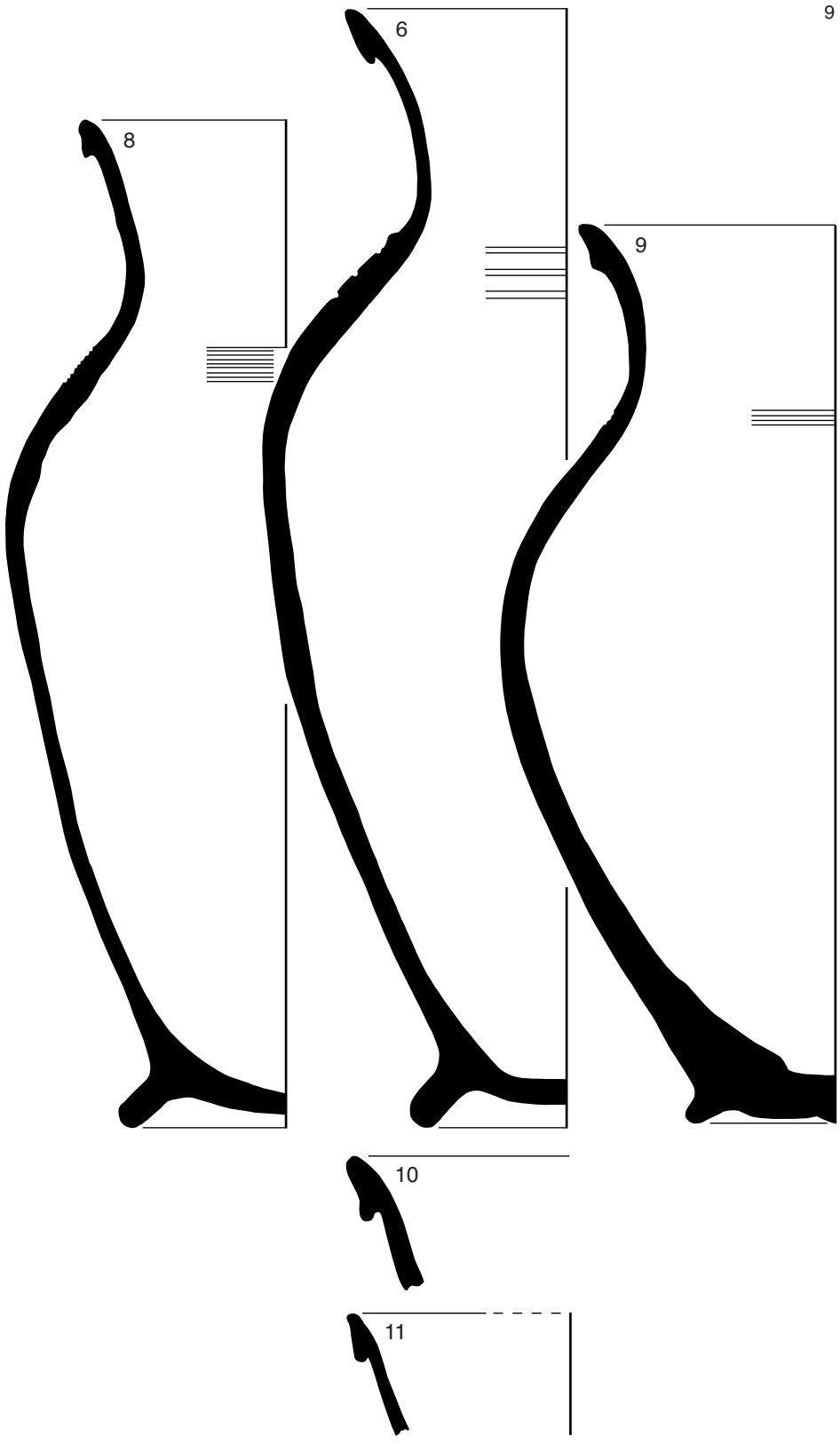
250 A 2

9




## 245 A 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | D | 102542 | A | Ig | 10YR 7/4 | ø rim : 90. Burial D.164 dug from Ig. |
| 2* | D | 101923 | A | Ii | 10YR 8/3 | ø rim : 82. *TD* 2, Pl. 20 : 6. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 3 | N | 2P 496 | TB | II | greenish | ø rim : 105. Burial 1B 249 dug from II. *OIP* 78, Pl. 95 : 15 (complete shape provided by OI, Chicago). |

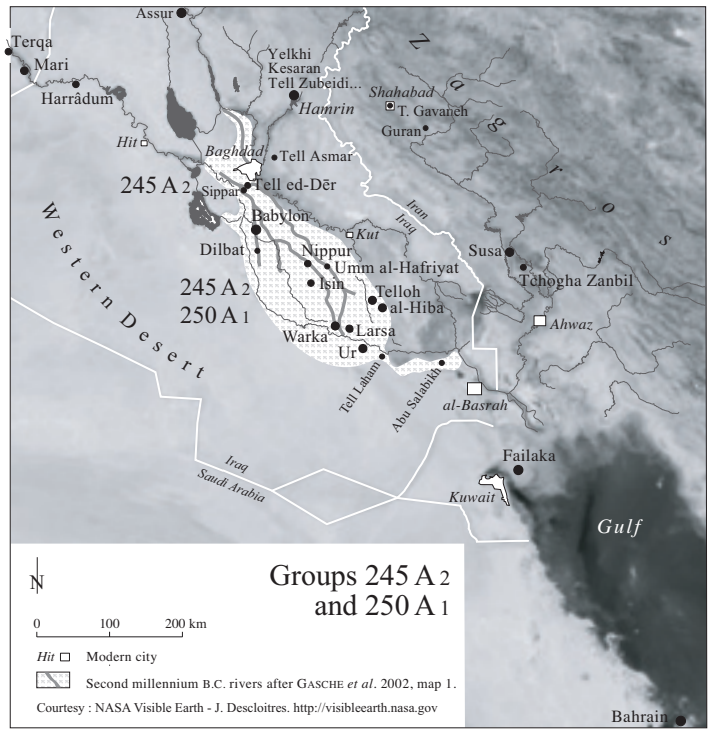
## 250 A 1

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 4 | W | 14576g | Pb 12-3 | - | *rotgrau* | ø rim : 86. Burial 20. *AUWE* 10, Pl. 13 : g = VAN ESS 1988b, fig. 8 : 40. |
| 5 | W | 14576a | Pb 12-3 | - | *hellgrau* | ø rim : 90. Burial 20. *AUWE* 10, Pl. 13 : a = VAN ESS 1988b, fig. 7 : 34. |

## 250 A 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 6 | D | 103729 | A | IIc | 2.5YR 5/4<br>S : 5YR 7/2 | ø rim : 130. Burial 235 probably dug from IIc. |
| 7* | D | 103903 | A | IIc | 5YR 7/4 | ø rim : 122. Burial 240B dug from IIc. *TD* 4, Pl. 21 : 4. |
| 8 | D | 104069 | A | IIc | 2.5YR 5/4 | ø rim : 122. Burial 236 dug from IIc. |
| 9 | D | 102940 | A | IIc | 10YR 7/3 | ø rim : 120. Burial 204 dug from IIc. |
| 10* | D | 102574 | A | IIe | 5YR 6/4 | ø rim : -. Pit 9 dug from IIe. |
| 11* | D | 100626 | A | IIf-g | 10YR 7/3 | ø rim : ± 130. |

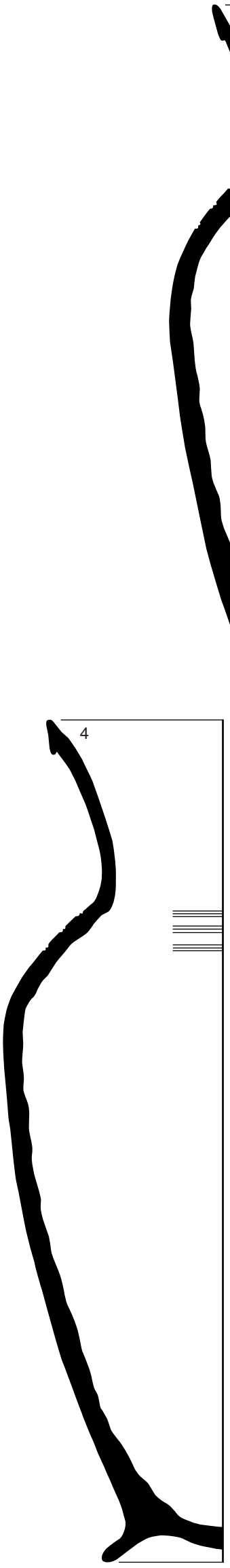
Continued on Pl. 111

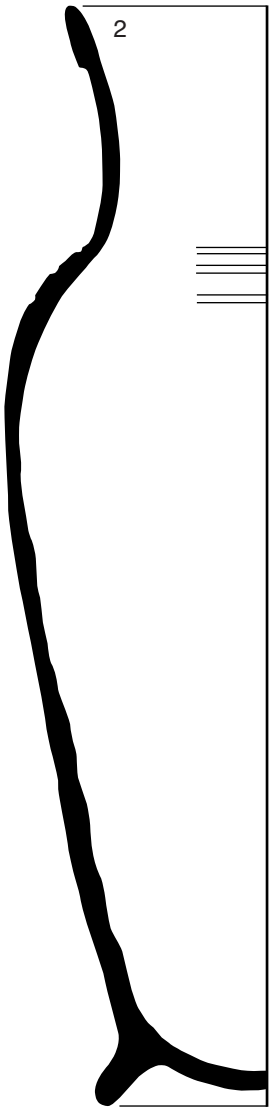


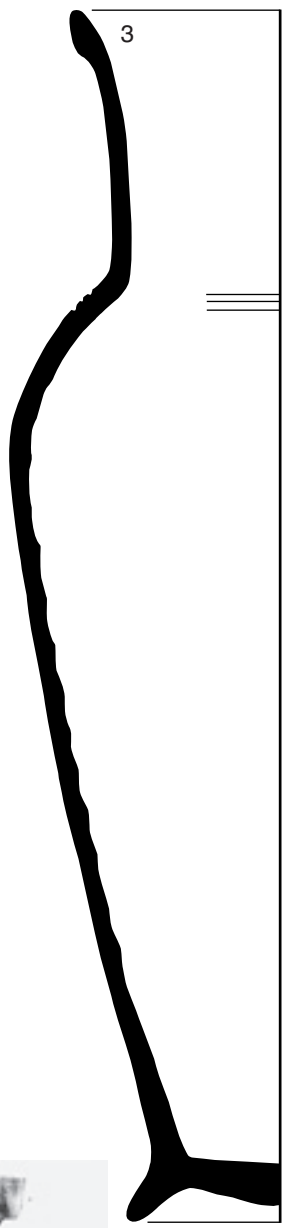

10 cm

(Photos at various scales)

250 A 2



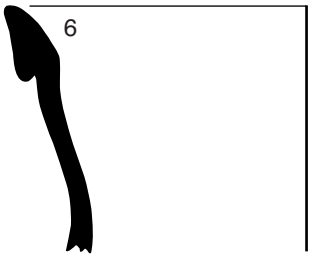



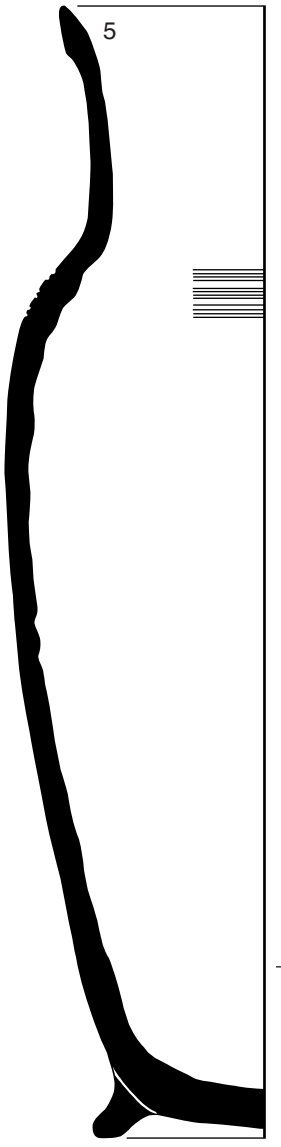
3

—1750




4




—1800

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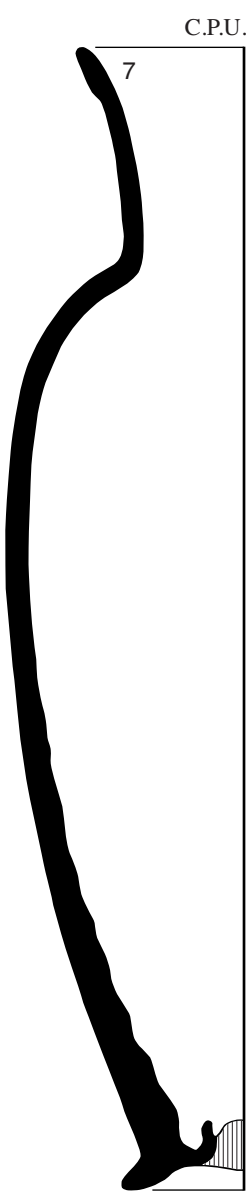
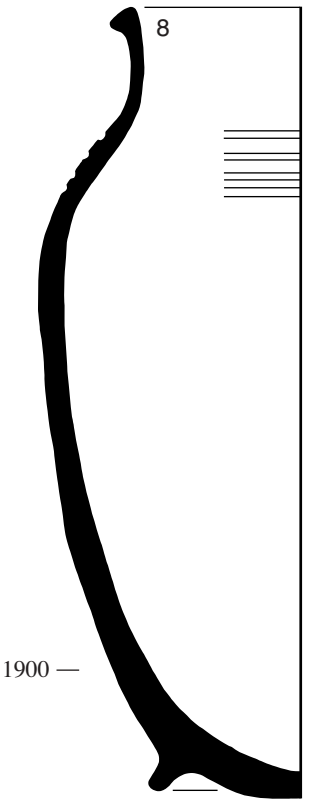
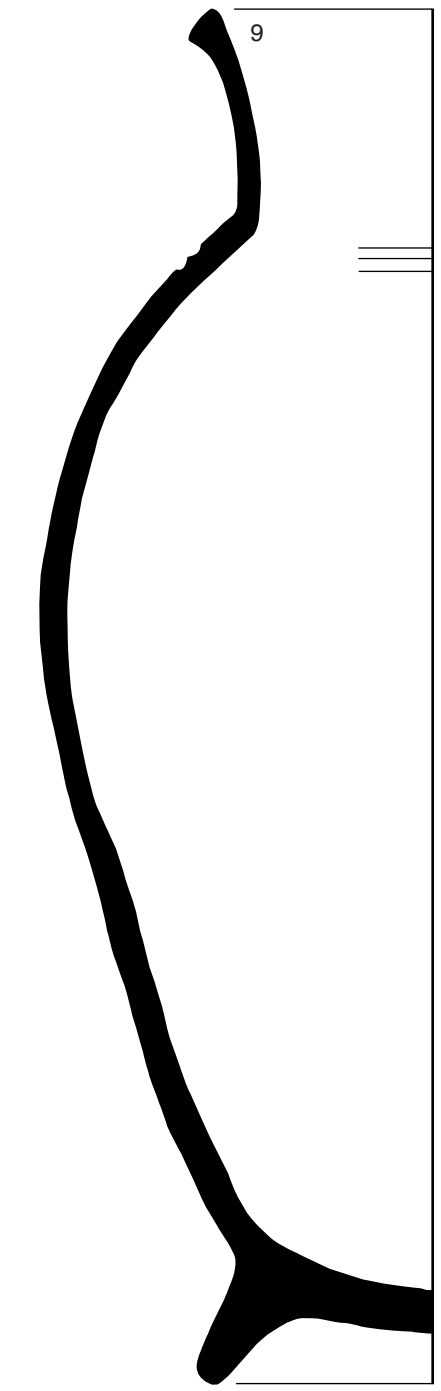
250 A 2 | 250 B 2

C.P.U.




S. A. P.

1950 —

S. A. P.

# PLATE 111

## 250 A 2

Continued from Pl. 110

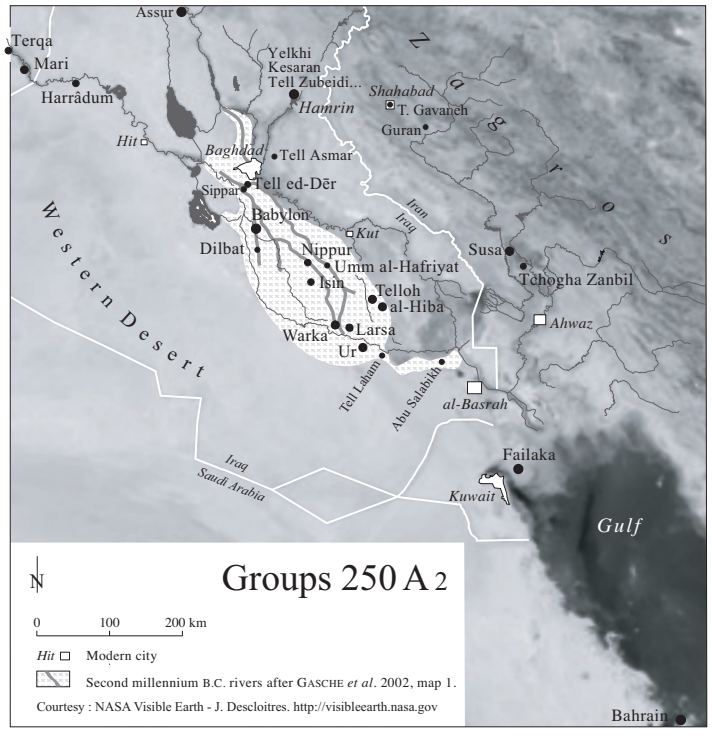
| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | D | 102283 | A | Ii | 7.5YR 7/4 | ø rim : 117. Burial 149 dug from Ii. |
| 2 | D | 103707 | A | Ii | 5YR 7/3 | ø rim : 108. Burial 232B dug from Ii. |
| 3 | D | 101826 | A | Ii | 2.5YR 5/4 | ø rim : 109. Burial 62 dug from Ii. *TD* 2, Pl. 17 : 2. |
| 4 | D | 102692 | A | IIa | 7.5YR 6/4 | ø rim : 136. Burial 179 dug from IIa. |
| 5 | D | 102402 | A | IIa | 5YR 6/6 | ø rim : 106. *TD* 4, Pl. 19 : 2. |
| 6* | D | 102431 | A | IIa | 10YR 7/3 | ø rim : 160. *TD* 4, Pl. 19 : 5. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 7 | L | L. 349 | - | - | 10YR 8/3 | ø rim : 90. Plugged base. Burial 101. Exc. Parrot 1933. Louvre, AO 24438. Drawn at the Louvre. PARDO 1979, Pl. 25. Photo Louvre. |

## 250 B 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 8 | N | 3P 574 | TA | XIII | tan | ø rim : 100. *OIP* 78, Pl. 90 : 17. |
| 9 | N | 3P 67 | TB | IV 2 | tan | ø rim : 130. Burial 1B 20 dug from IV 2. *OIP* 78, Pl. 86 : 9. |

C.P.U. = Chronological Position Uncertain

Continued on Pl. 112




10 cm

(Photos at various scales)

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3

1

3

4

C.P.U.

7

6

C.P.U.

8

—1800

5

9

—1900

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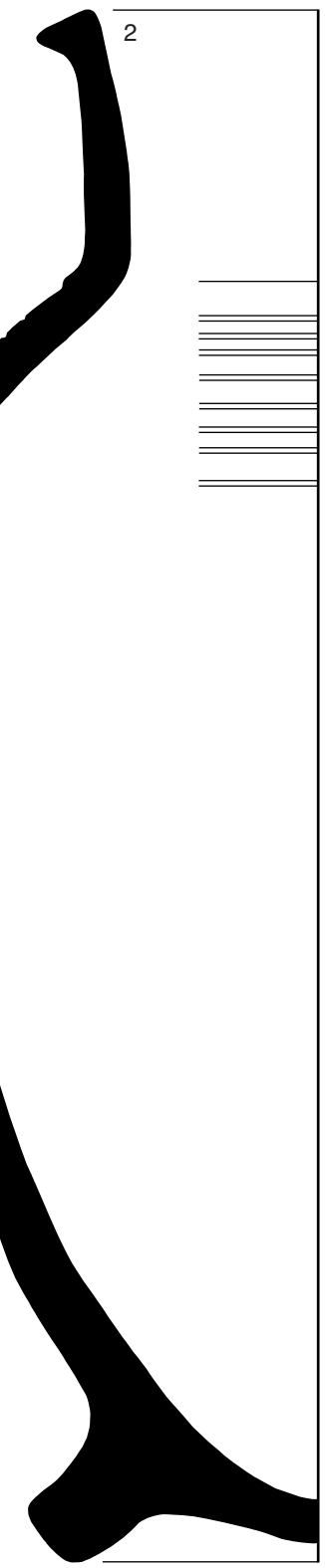
# PLATE 112

## 250 B 2

Continued from Pl. 111

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | I | IB 1921 | *SOA* | 6,37m | - | ø rim : 48. Burial 155. *Isin* 4, Pl. 61 : 2 (photo of vessel *in situ* ; drawing not published). |
| 2 | U | 1 UmH 163 | A | II | 10YR 6/3<br>S : 10YR 8/3 | ø rim : 148. |
| 3 | U | 1 UmH 177 | A | II | 5YR 7/6 | ø rim : 112. Burial 14 dug from II. |
| 4 | N | 2P 698 | TB | III | light green | ø rim : 107. Burial 1B 290-91 dug from III. *OIP* 78, Pl. 86 : 11. |
| 5 | H | 5 H 16 | B | - | 5YR 6/4<br>S : 10YR 5/3 | ø rim : 120. Burial 5 HB 9. |
| 6 | N | 14 N 341 | WC-3 | IV | - | ø rim : 114. Burial 65 dug from IV. |
| 7 | T | TG. 1116 | - | - | - | ø rim : 117. Exc. de Genouillac 1929-31. Louvre, AO 24631 = AO 11855. Drawn at the Louvre. |
| 8 | L | L. 188 | *Zone sud-est* | - | 2.5YR 6/4 | ø rim : 102. Patched base. Exc. Parrot, 1933. Louvre, AO 17050. Drawn at the Louvre. PARDO 1979, Pl. 31. |
| 9 | N | 2N 30 | TB | III | brownish<br>S : buff | ø rim : 110. Burial 1B 287 dug from III. *OIP* 78, Pl. 86 : 10 (applique not shown). |

C.P.U. = Chronological Position Uncertain

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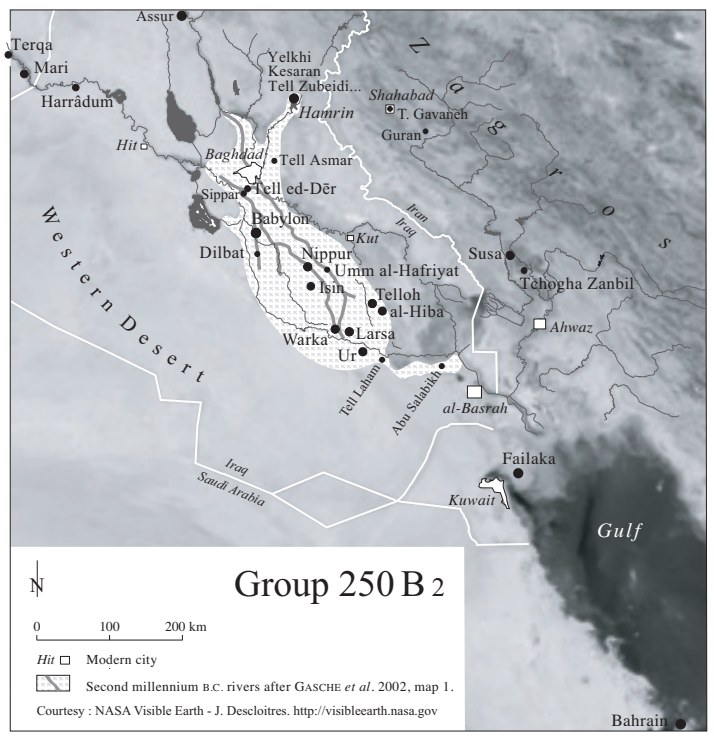


10 cm

(Photos at various scales)

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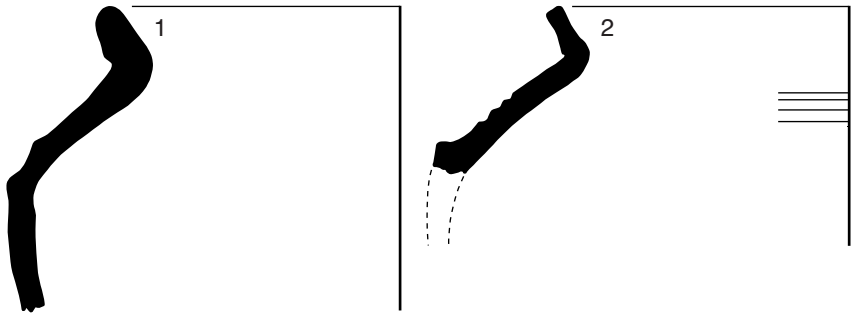
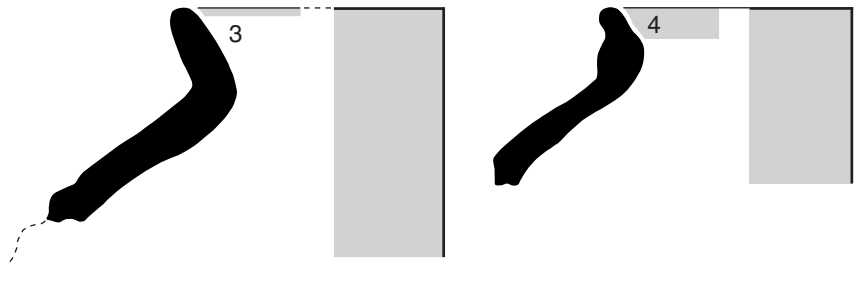
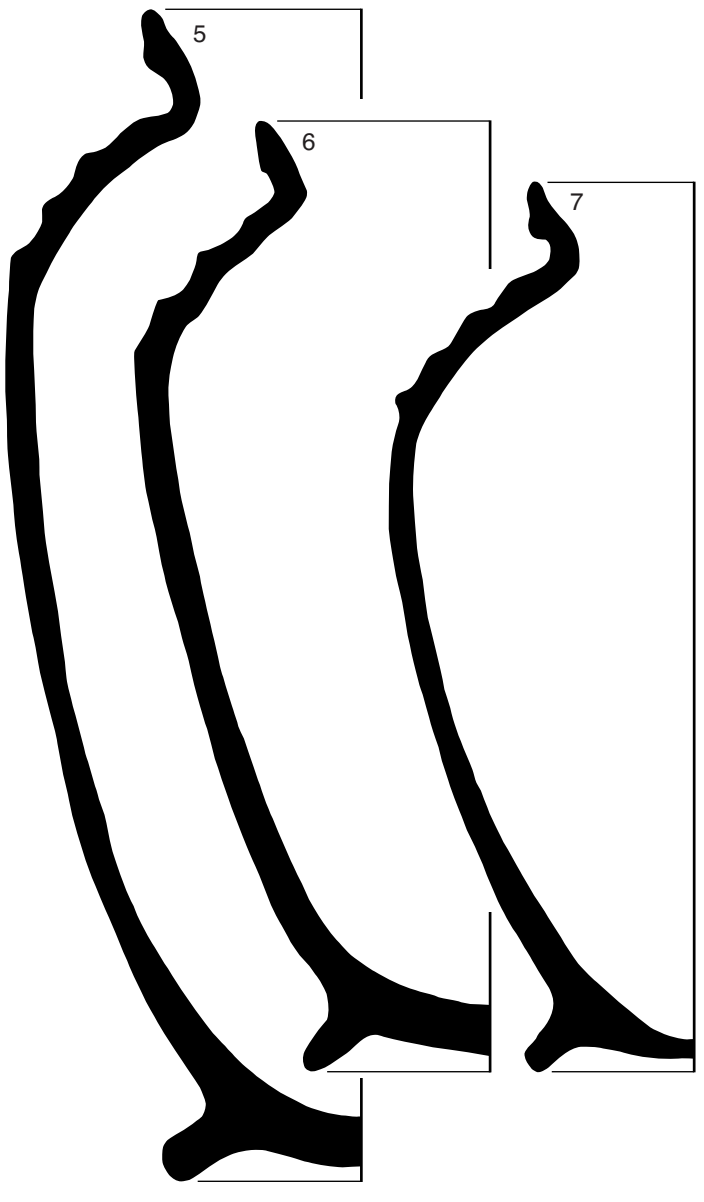
—1900



1




—2000

NORTHERN ALLUVIAL PLAIN

SOUTHERN ALLUVIAL PLAIN

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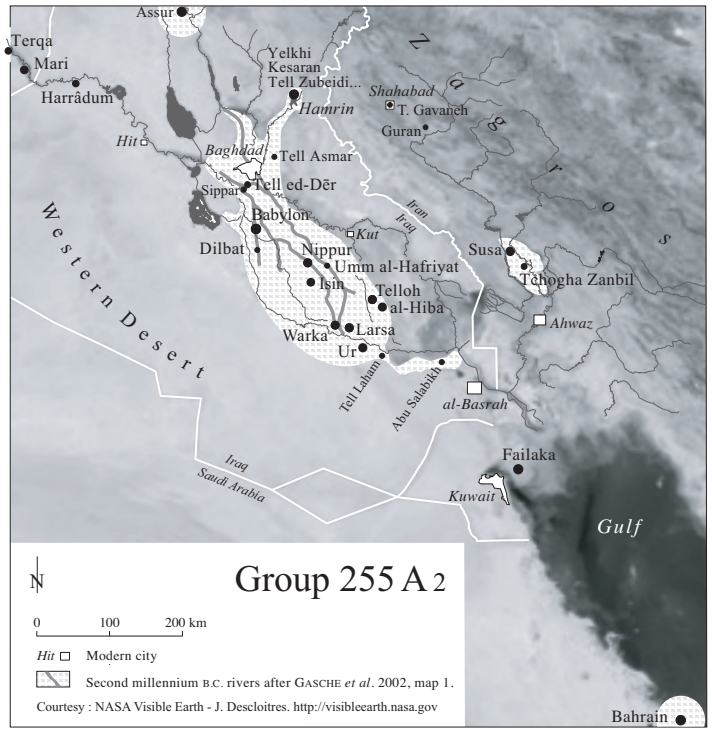
# PLATE 113

## 255 A 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 102707 | A | IVa | 5Y 7/2 | ø rim : 160. *TD* 4, Pl. 9 : 4. |
| 2* | D | 102705 | A | IVa | 5YR 6/6 | ø rim : 160. *TD* 4, Pl. 9 : 3. |
| 3* | D | 109678 | A | IVb | 5YR 7/6 | ø rim : -. |
| 4* | D | 109679 | A | IVb | 7.5YR 8/4 | ø rim : 133. Pit 15 dug from IVb. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 5 | N | 14 N 400 | WC-3 | VB | yellow | ø rim : 116. Burial 80 dug from VB. |
| 6 | N | D 45 | WC-3 | VB | - | ø rim : 122. |
| 7 | N | 14 N 380 | WC-3 | VB | - | ø rim : 96. Burial 78 dug from VB. |
| DIYALA | | | | | | |
| 8 | Yel | HY 642B | B | VIc | *rossastro* | ø rim : 139. BERGAMINI 2002-03, Pl. 14 : 7. |
| 9 | Yel | HY 637 | B | VII-VIc | *giallo-verdastro* | ø rim : 146. BERGAMINI 2002-03, Pl. 14 : 10. |
| SUSIANA | | | | | | |
| 10 | S | GS-7175 | B | VI | *jaunâtre* | ø rim : 134. *MDP* 47, Pl. 27 : 1. |
| 11 | S | GS-6725 | B | VII | *ocre* | ø rim : 136. Burial S.263 probably dug from VII. Drawing not published, but see *MDP* 47, Pl. 65 : 3 for a photo. |
| 12 | S | GS-7173 | B | VII | *jaunâtre* | ø rim : -. *MDP* 47, Pl. 27 : 4. |




10 cm

(Photos at various scales)

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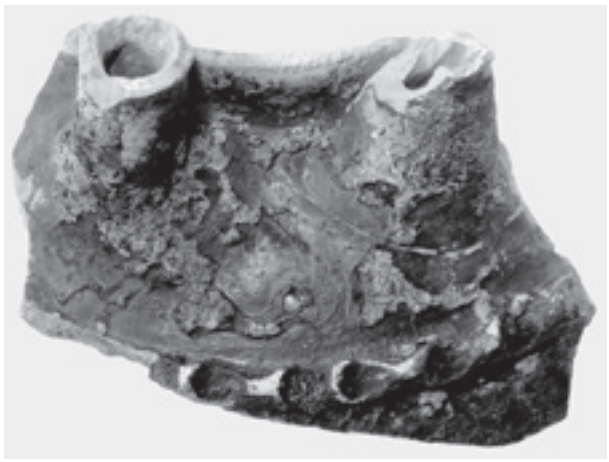
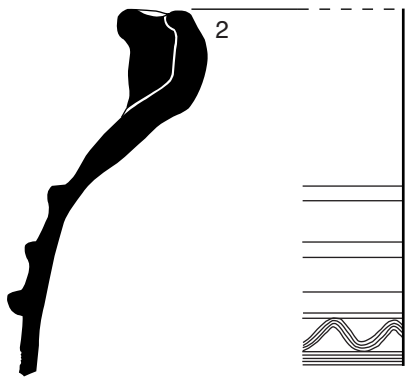
—1700

255 B



1

2



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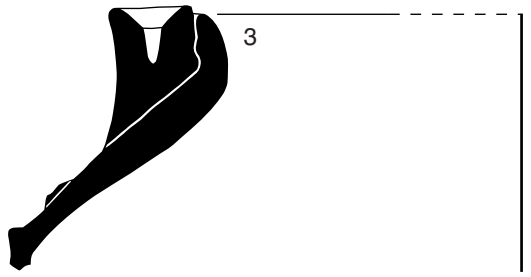

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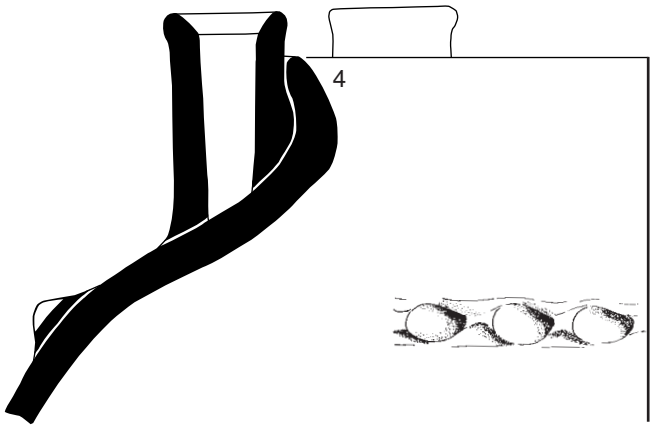

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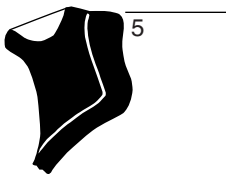

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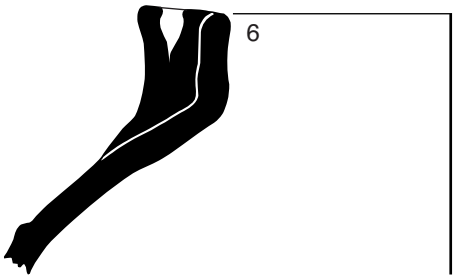
6



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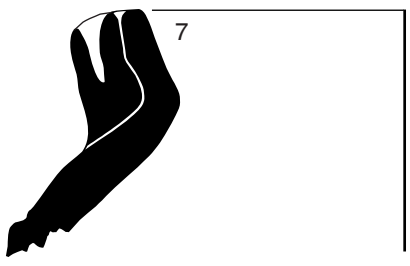
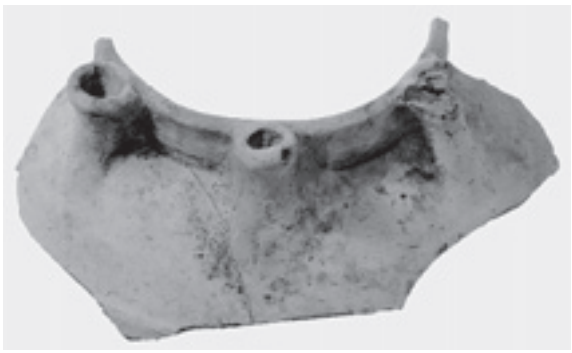


8

9

—1800



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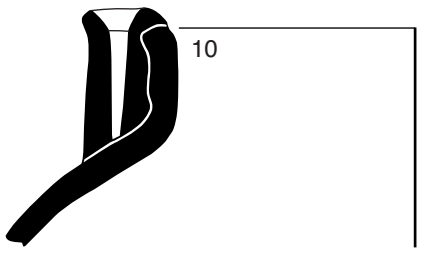
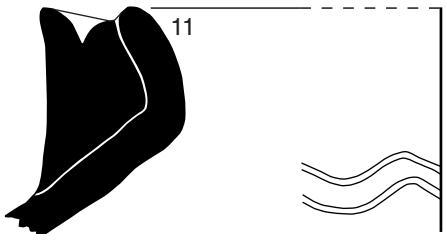


11



—1900

NORTHERN ALLUVIAL PLAIN

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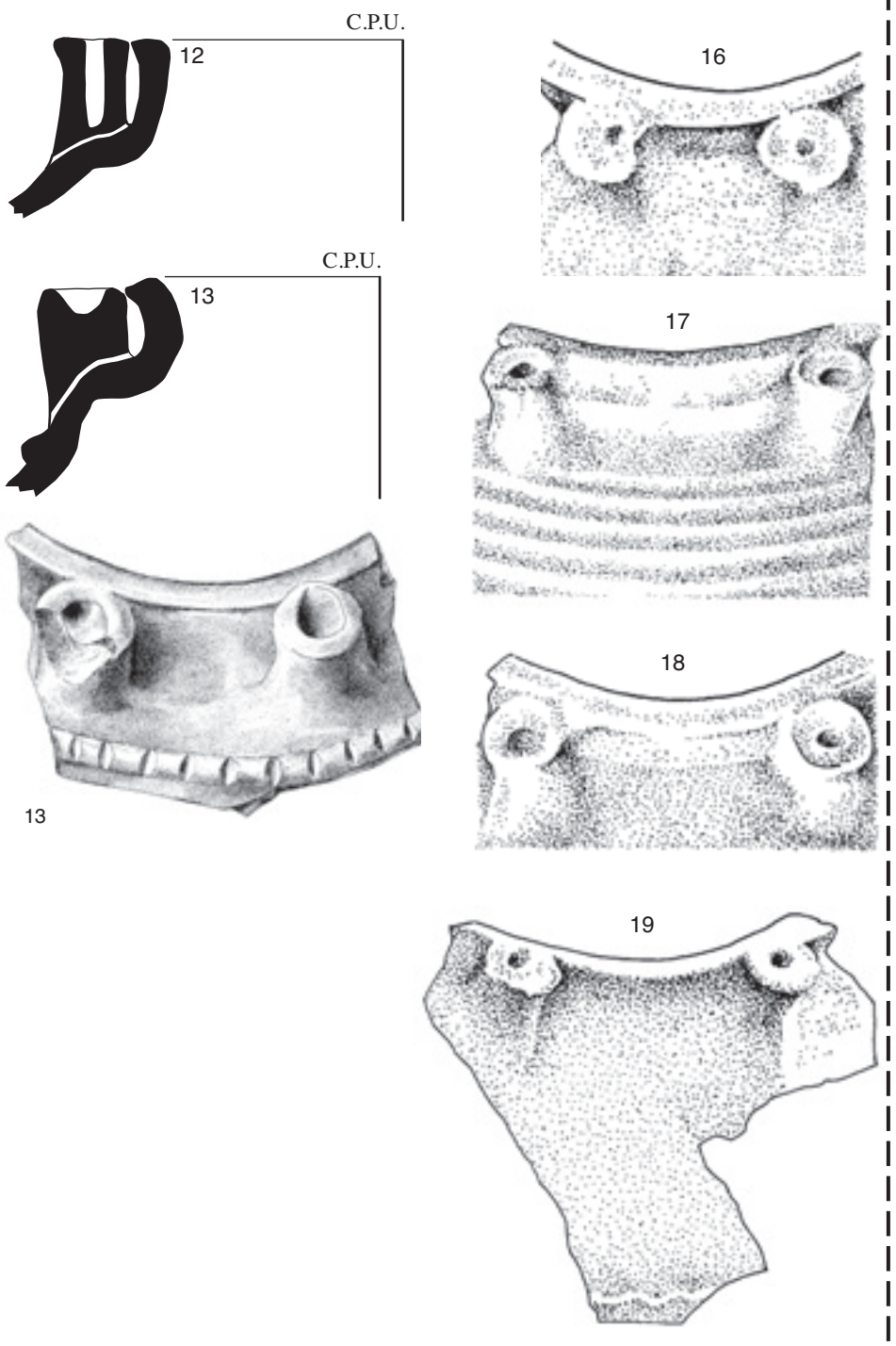
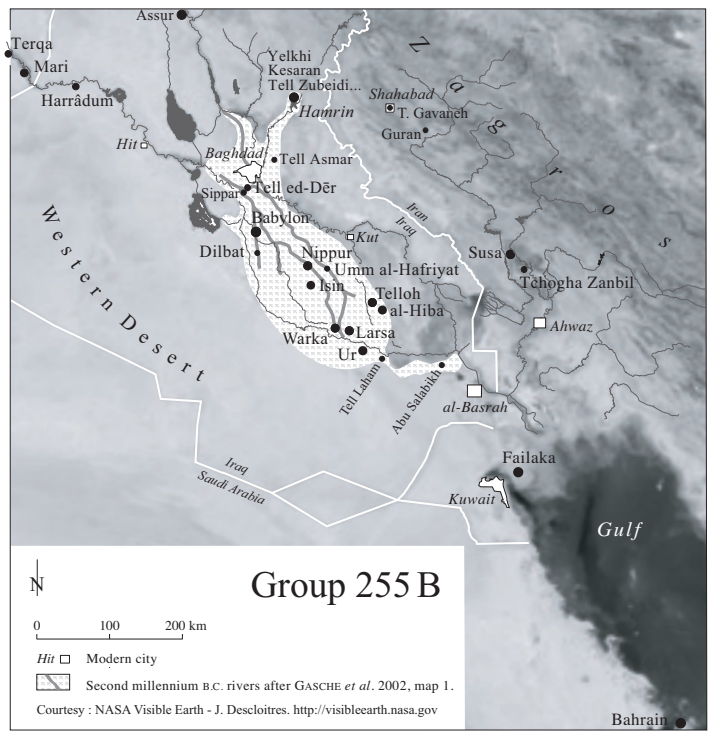
# PLATE 114

## 255 B




| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | D | 101447 | A | If | 5Y 8/3 | ø rim : -. 1 false spout is preserved. |
| 2* | D | 102728 | A | Ih | 7.5YR 6/4 | ø rim : ± 125. 1 false spout is preserved. |
| 3 | D | 101878 | A | Ih | 5YR 5/6 | ø rim : ± 170. 2 false spouts are preserved. |
| 4 | D | 103530 | A | Ii | 5YR 5/6 | ø rim : 190. 2 (of a total of probably 6) false spouts are preserved. *TD* 4, Pl. 19 : 1. Covered with bitumen. |
| 5 | D | 101478 | A | Ii | 10YR 7/3 | ø rim : -. 1 false spout is preserved. *TD* 2, Pl. 23 : 6. |
| 6* | D | 102325 | A | Ik | 7.5YR 6/4 | ø rim : 130. 3 (of a total of probably 6) false spouts are preserved. |
| 7* | D | 102373 | A | IIa | 7.5YR 6/4 | ø rim : 145. 2 (of a total of probably 6) false spouts are preserved. |
| 8 | D | 102344 | A | Ik | 7.5YR 6/4 | ø rim : 135. 1 false spout is preserved. |
| 9* | D | 102989 | A | IIa | 7.5YR 6/4 | ø rim : ± 150. 1 false spout is preserved. |
| 10* | D | 102994 | A | IIb | 10YR 7/3 | ø rim : 145. 1 false spout is preserved. |
| 11* | D | 102616 | A | IIe | 7.5YR 6/4 | ø rim : ± 170. 1 false spout is preserved. *TD* 4, Pl. 14 : 9. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 12 | I | - | *NOA* I | - | 7.5YR 8/4<br>S : 10YR 8/2 | ø rim : 144. 2 false spouts are preserved. *Isin* 3, 80, Pl. 30 : 10. |
| 13 | I | - | *NOA* III | Surface | - | ø rim : 153. 2 false spouts are preserved. *Isin* 3, 80, Pl. 30 : 9. |
| 14 | Ur | U.17082 | AH | - | - | ø rim : 96. Burial LG/67. WOOLLEY & MALLOWAN 1976, 193, 201, 248, Pls. 94 : e and 113 : 128. Six false spouts applied symmetrically around the neck. |
| 15 | N | D 45 | WC-3 | VB | buff<br>S : cream | ø rim : ± 140. 1 false spout is preserved. |
| DIYALA | | | | | | |
| 16 | Hal | - | A | - | - | ø rim : -. 2 false spouts are preserved. After GHASSAN 1995, 79, Pl. 48 : E. |
| 17 | Hal | - | A | - | - | ø rim : -. 2 false spouts are preserved. After GHASSAN 1995, 79, Pl. 48 : D. |
| 18 | Hal | - | A | - | - | ø rim : -. 2 false spouts are preserved. After GHASSAN 1995, 79, Pl. 48 : G. |
| 19 | As | - | - | - | - | ø rim : -. 2 false spouts are preserved. After *OIP* 63, 121, Pl. 127 : b. |

C.P.U. = Chronological Position Uncertain




10 cm

(Photos at various scales)

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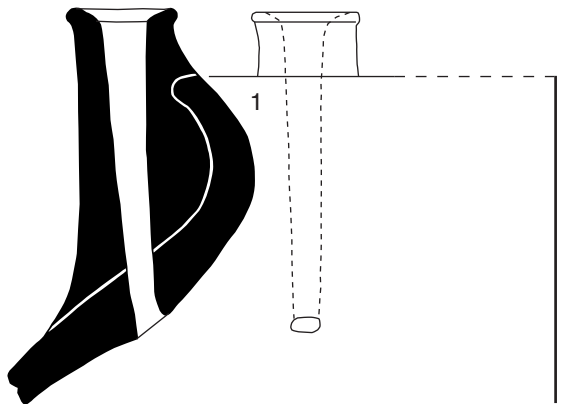
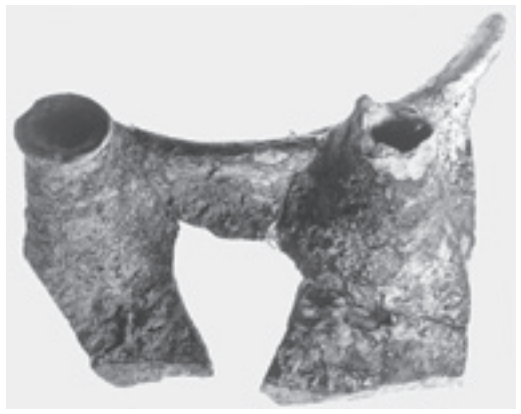
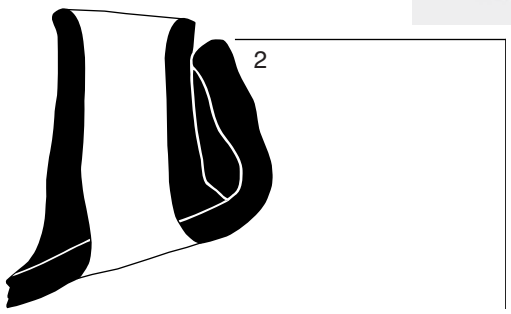
—1700

255 C

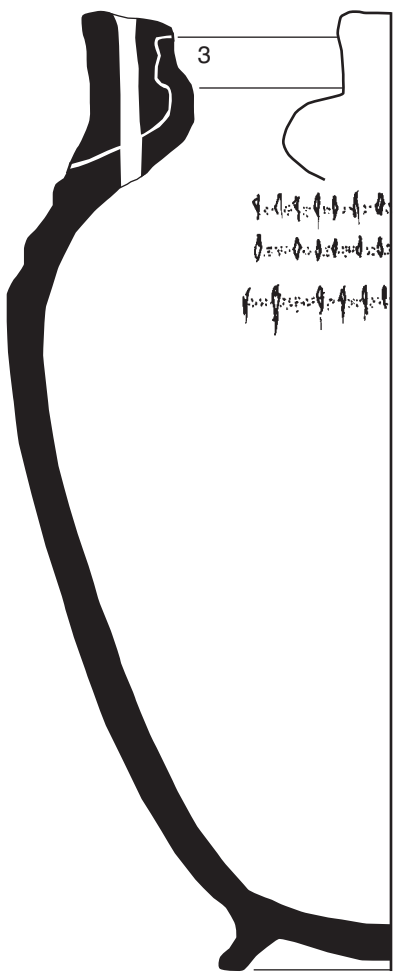


1




—1800




—1900

NORTHERN ALLUVIAL PLAIN S. A. P.

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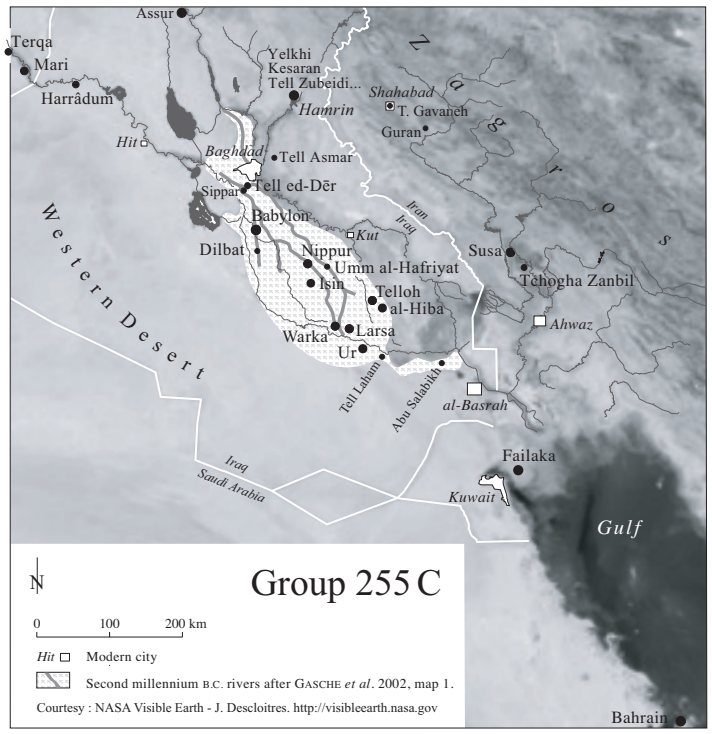
# PLATE 115

## 255 C

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | D | 101676 | A | If | 2.5YR 4/6 | ø rim : ± 200. 2 (of a total of probably 8) spouts are preserved. *TD* 2, Pl. 23 : 8. Covered with bitumen. |
| 2 | D | 103773 | A | Ii | 10YR 7/3 | ø rim : 165. 1 spout preserved. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 3 | W | 14517 | P XIII | - | *hellgrau* | ø rim : 130. Burial 12. 4 spouts. *AUWE* 10, Pl. 7 : Grab 12o. BOEHMER 1995, fig. 4. VAN ESS 1988b, fig. 3 : 5. |




10 cm

(Photos at various scales)

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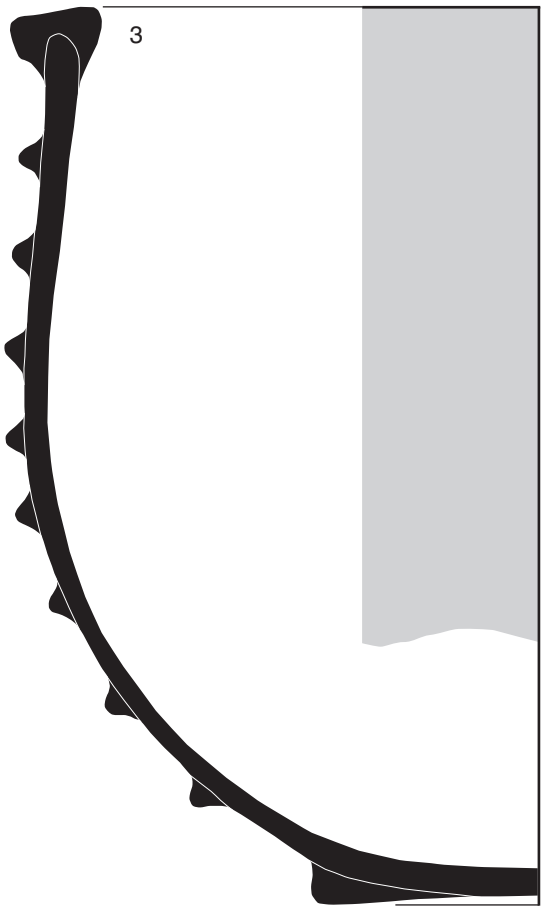
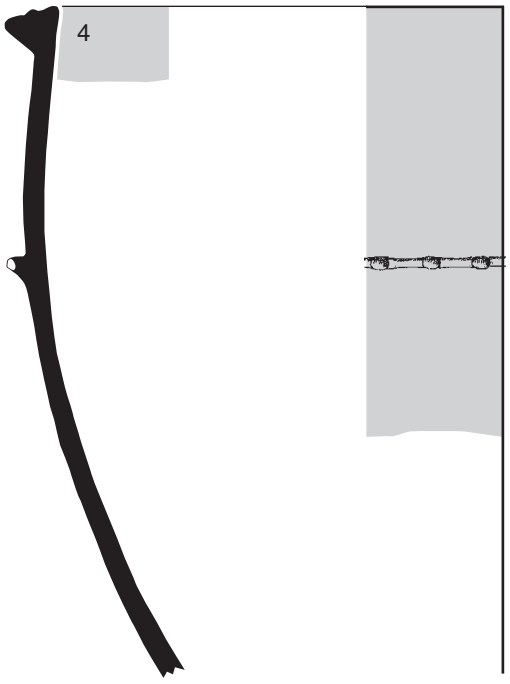
—1700




—1800

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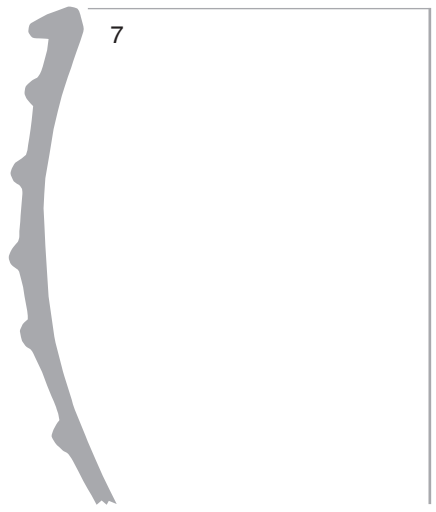
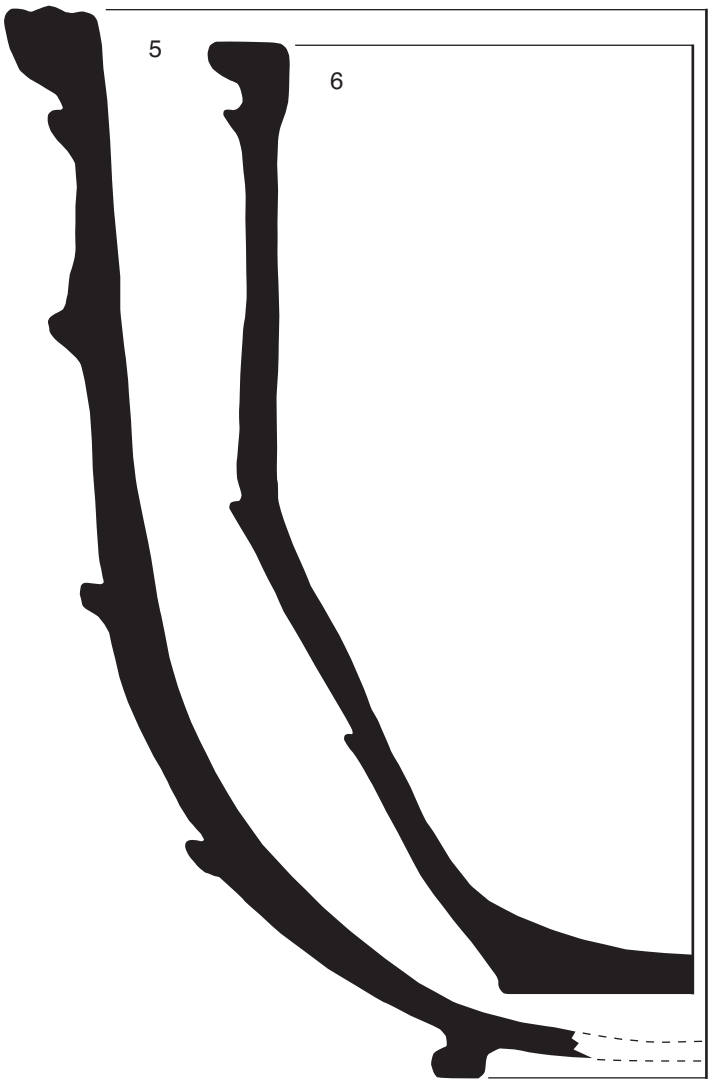
# PLATE 116

## 260 A 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | D | 102957 | A | Ig | 2.5Y 8/4 | ø rim : 665. Burial D.207 dug from Ig. |
| 2* | D | 102808 | A | Ii | 2.5Y 7/4 | ø rim : -. |
| 3* | D | 102551 | A | Ii | 5YR 5/6 | ø rim : 700. 5 ropes are embedded in bitumen between the six upper ridges. |
| 4* | D | 102403 | A | IIa | 2.5Y 6/4 | ø rim : 656. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 5 | N | - | WA | VIA | buff<br>S : cream | ø rim : 915. |
| 6 | N | - | WA | VIA | - | ø rim : 625. |
| DIYALA | | | | | | |
| 7 | Yel | y 292 | B | Vb | *giallo-verdastro* | ø rim : 525. GABUTTI 2002-03, Pl. 56 : 12. |

Continued on Pl. 117




20 cm

(Photos at various scales)

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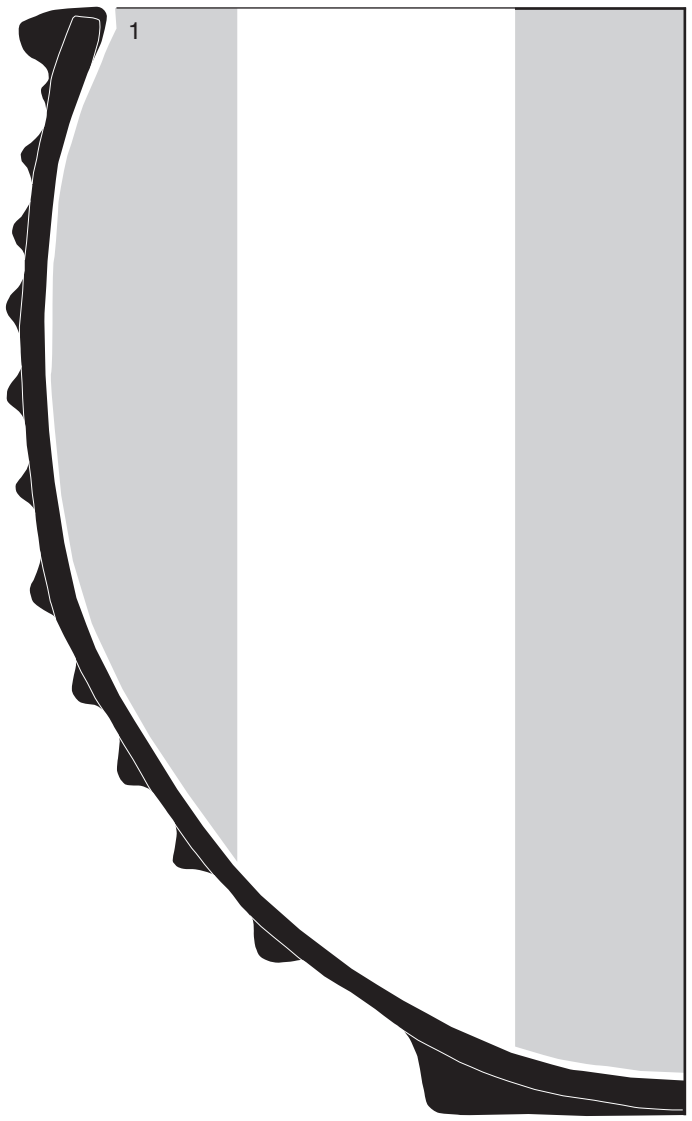
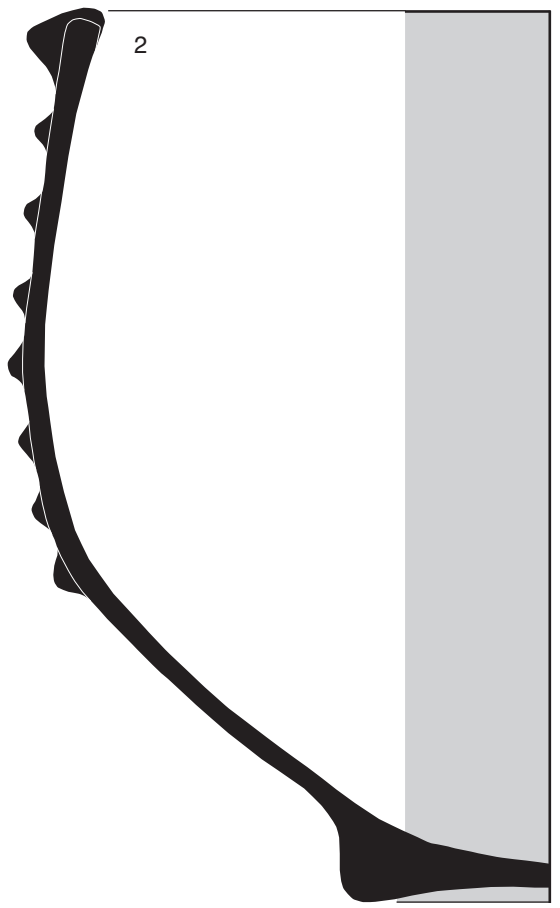
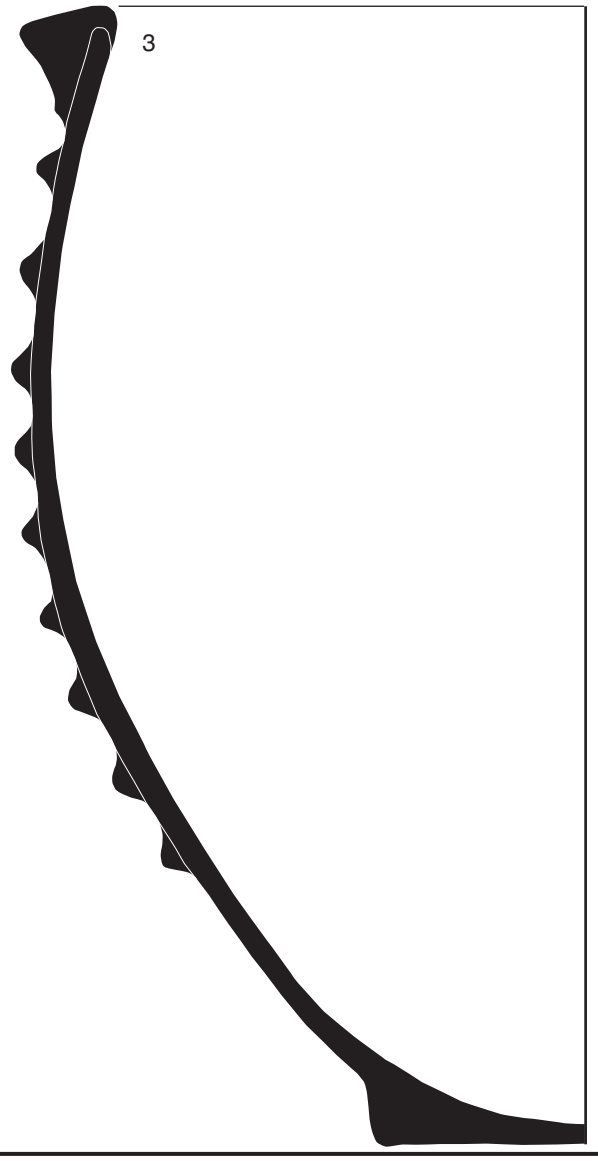
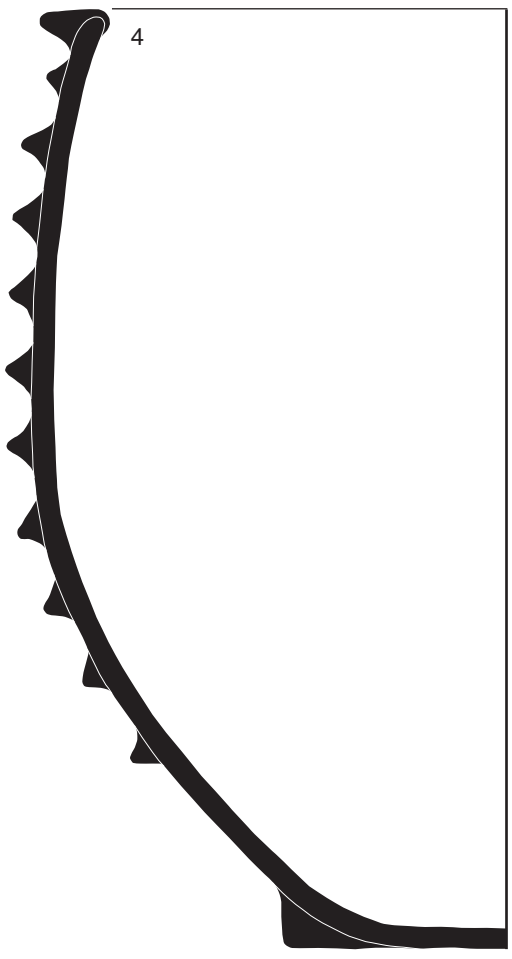
260 A 2




—1650




—1700

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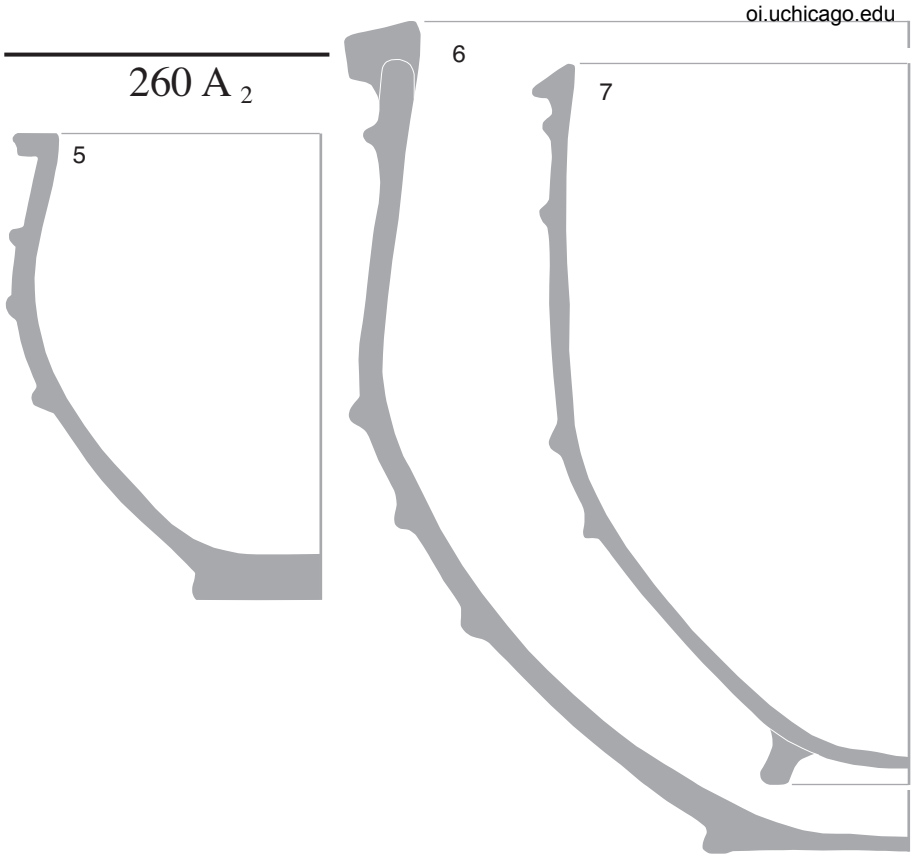


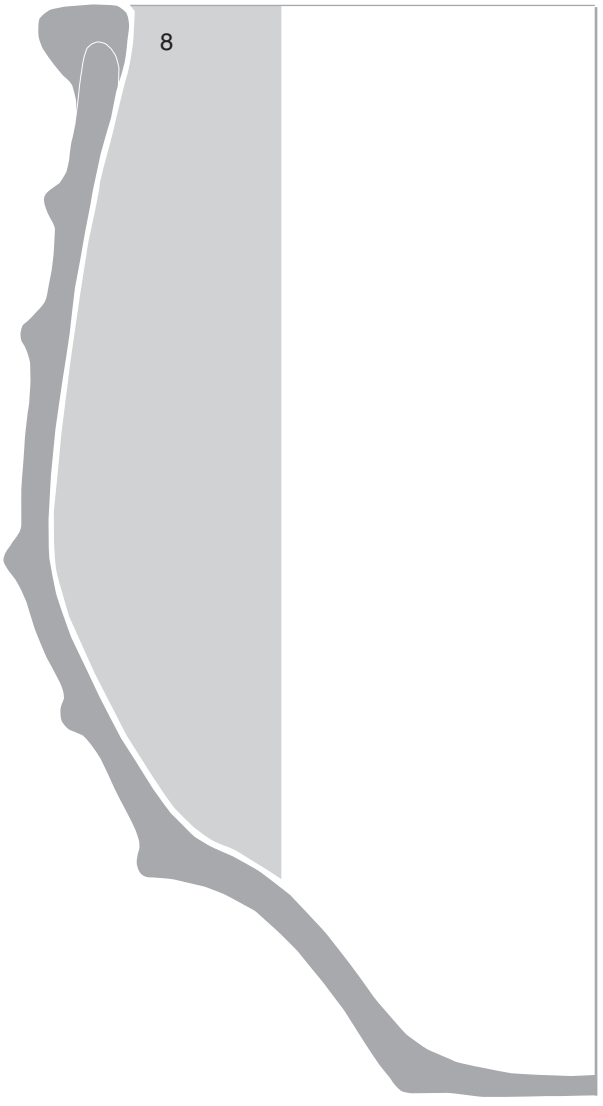


# PLATE 117

## 260 A 2

Continued from Pl. 116

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | D | 101054 | A | Ic | 5Y 6/4 | ø rim : 875. Burial D.16 dug from Ic. SALLABERGER 1996, Pl. 6. |
| 2 | D | 101053 | A | Ic | 5Y 7/3 | ø rim : 700. Burial D.14A dug from Ic. |
| 3 | D | 101705 | A | Ie | 5Y 7/4 | ø rim : 750. Burial D.56 dug from Ie. |
| 4 | D | 101762 | A | Ie | 5Y 7/3 | ø rim : 620. Burial D.58 dug from Ie. |
| DIYALA | | | | | | |
| 5 | Yel | HY 410 | B | IVb | *rossastro* | ø rim : 404. GABUTTI 2002-03, Pl. 58 : 1. |
| SUSIANA | | | | | | |
| 6 | S | GS-6877 | A | XIV | *jaunâtre* | ø rim : 740. *MDP* 47, Pl. 42 : 8. |
| 7 | S | GS-6892 | A | XIV | *verdâtre* | ø rim : 495. *MDP* 47, Pl. 43 : 3. |
| 8 | S | GS-6805 | A | XV | *jaunâtre* | ø rim : 735. *MDP* 47, Pl. 41 : 3. |

Continued on Pl. 118

20 cm

(Photos at various scales)

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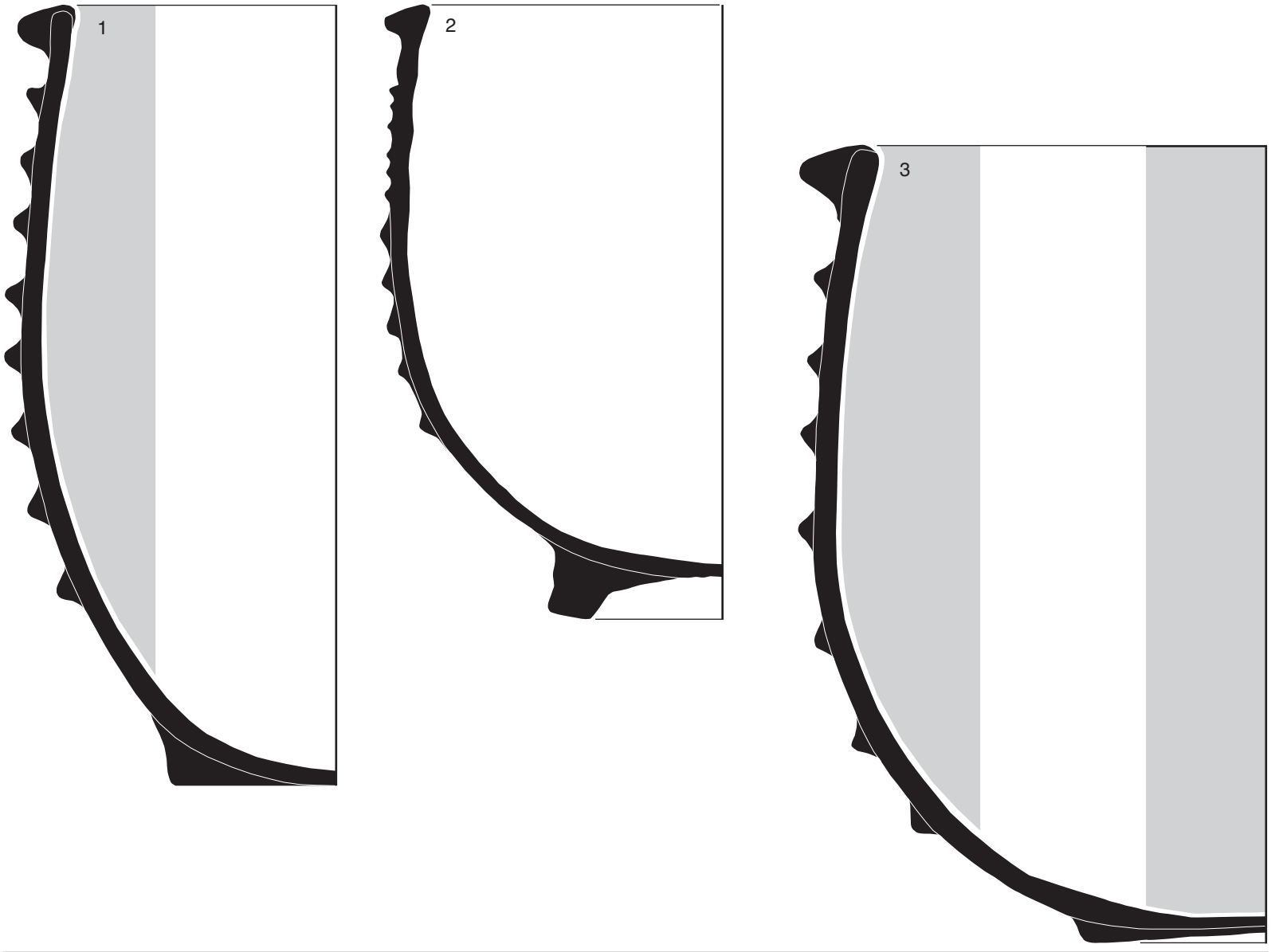

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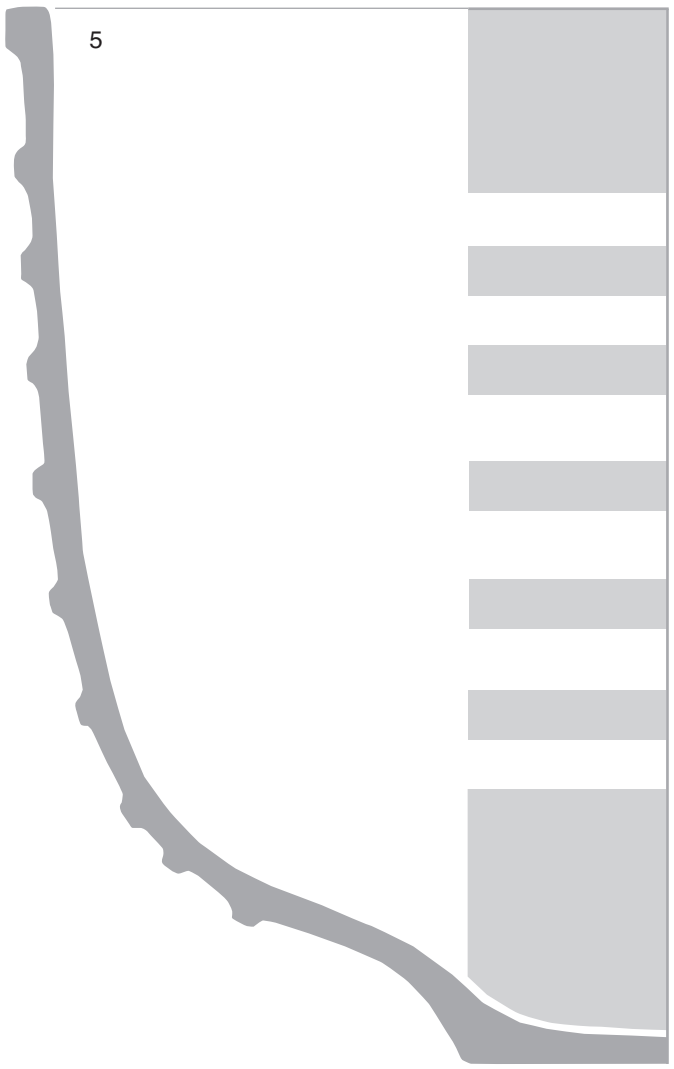


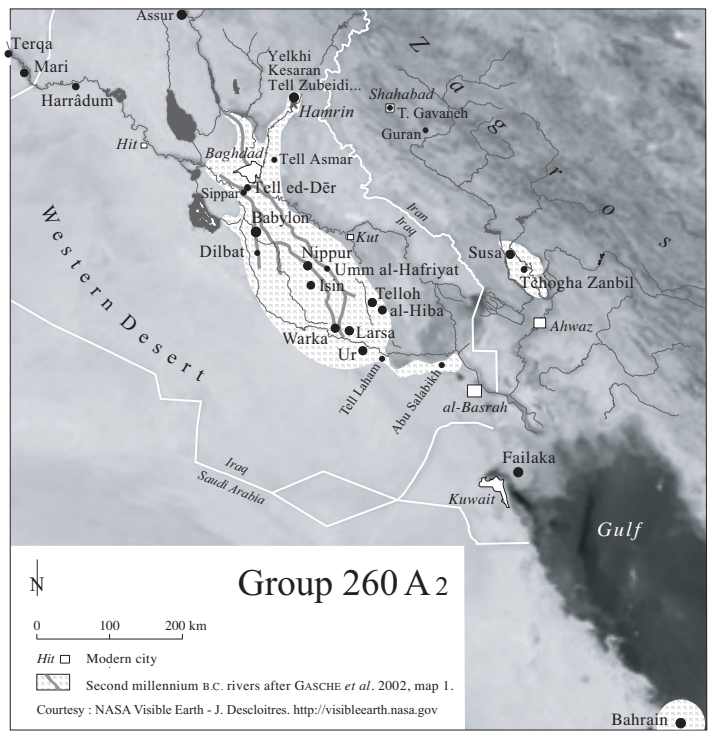



# PLATE 118

## 260 A 2

Continued from Pl. 117

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | D | 105825 | E | IIId | 5Y 6/3 | ø rim : 530. Burial D.328 dug from IIId. *MHEM* 1, Pls. 16 and 40 : 2. |
| 2 | D | 104427 | E | IIId | 5Y 6/2 | ø rim : 560. Burial D.274 probably dug from IIId. *MHEM* 1, Pls. 17 and 40 : 3. |
| 3 | D | 105719 | E | IIIf | 5Y 7/2 | ø rim : 775. *MHEM* 1, Pl. 40 : 1. |
| SUSIANA | | | | | | |
| 4 | S | GS-6882a | A | XII *récent* | *jaunâtre* | ø rim : 545. Burial S.99 probably dug from XII. *MDP* 47, Pl. 42 : 6. |
| 5 | S | GS-6873 | A | XIII | *jaunâtre* | ø rim : 870. Burial S.147 dug from XIII. *MDP* 47, Pl. 41 : 1. |




20 cm

(Photos at various scales)

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260 B 2

—1000

3

—1100

C.P.U.

1

2

4

—1300

NORTHERN ALLUVIAL PLAIN

SOUTHERN ALLUVIAL PLAIN

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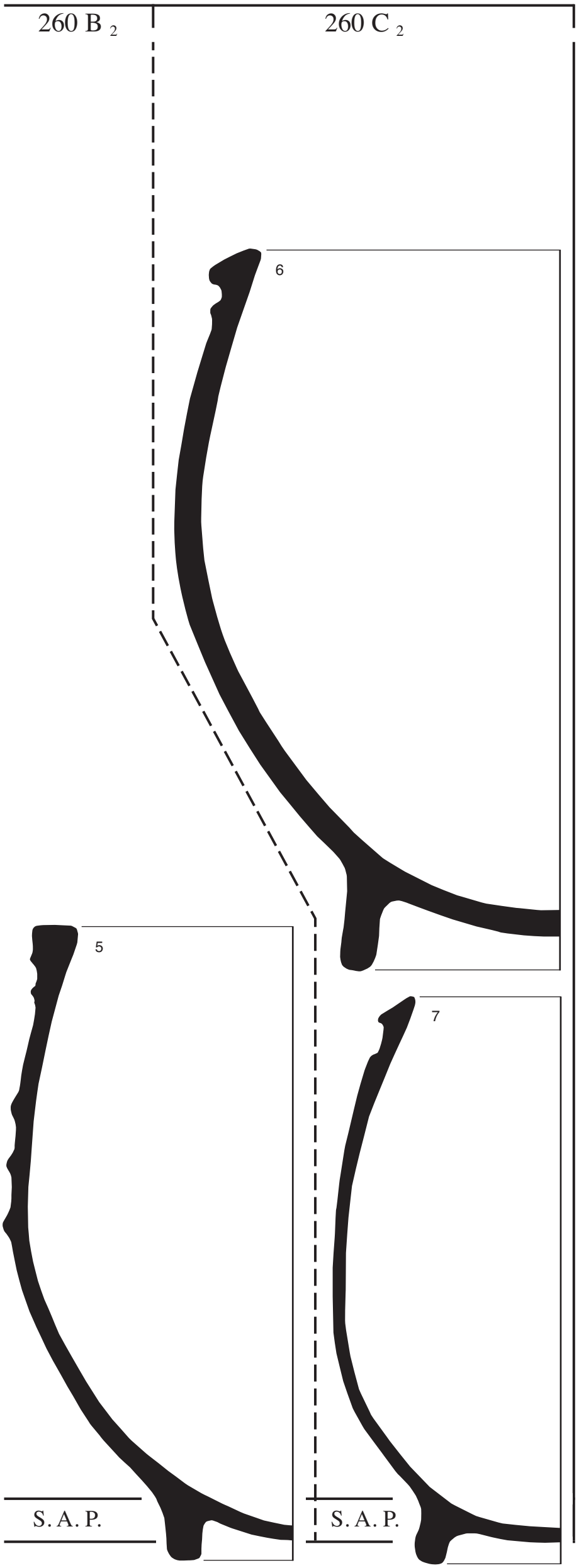
# PLATE 119



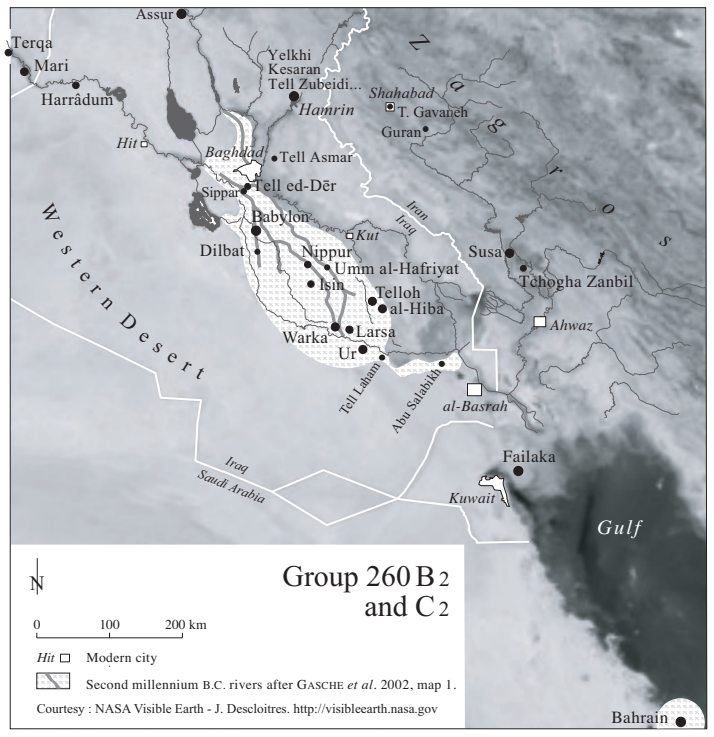

## 260 B 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 107475 | E3 | Ia0 | 5Y 7/3 | ø rim : 576. Burial D.368 dug from Ia0. *NAPR* 6, Pl. 16 : 11. |
| 2* | D | 107474 | E3 | Ia0 | 5Y 7/3 | ø rim : 584. Burial D.368 dug from Ia0. *NAPR* 6, Pl. 16 : 12. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 3 | I | 0016 | *NA* II | 6,88m | - | ø rim : 922. Burial 92. *Isin* 2, 47 ; see Plan 5 for location of the burial. |
| 4 | W | - | K 23-81 | - | - | ø rim : irregular. Burial 70. *AUWE* 10, Pl. 40 : Grab 70h. |
| 5 | N | - | WB | III | buff | ø rim : 550. Burial 36, upper burial jar. |

## 260 C 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 6 | I | 0015 | *NA* II | 2 | - | ø rim : 584. Burial 91 dug from *Schicht* 2. *Isin* 2, 47. See Plan 5 for location of the burial. |
| 7 | N | - | WB | III | buff | ø rim : 380. Unnumbered burial. |

C.P.U. = Chronological Position Uncertain




20 cm

(Photos at various scales)

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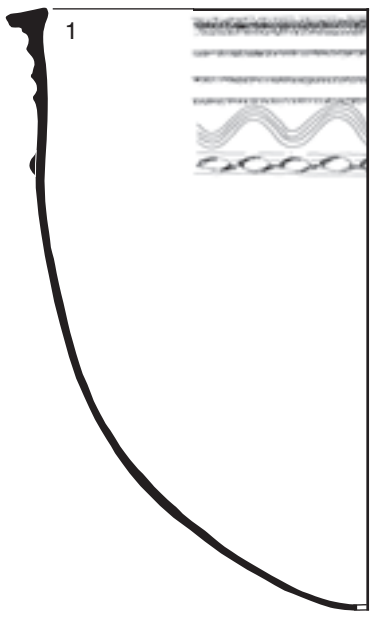
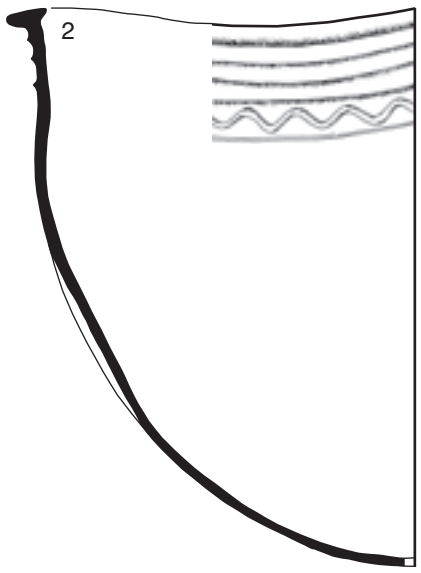
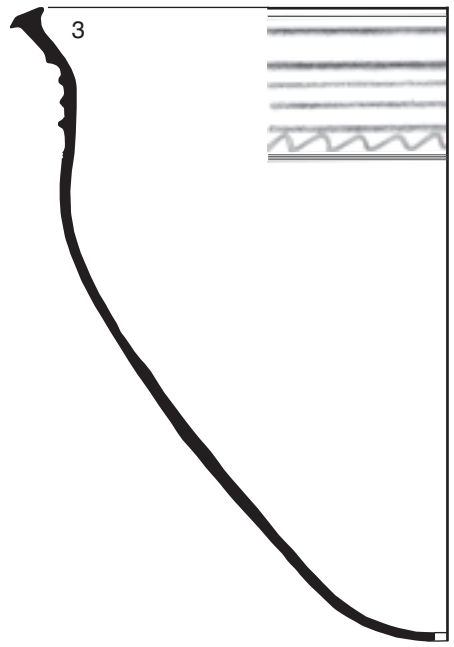
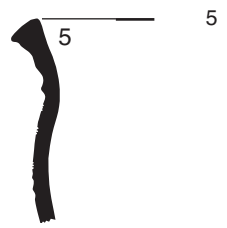
265 A 3

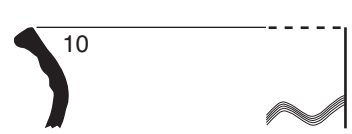


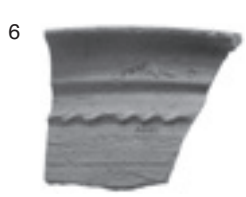






—1800





—1900

NORTHERN ALLUVIAL PLAIN S. A. P.

—2000

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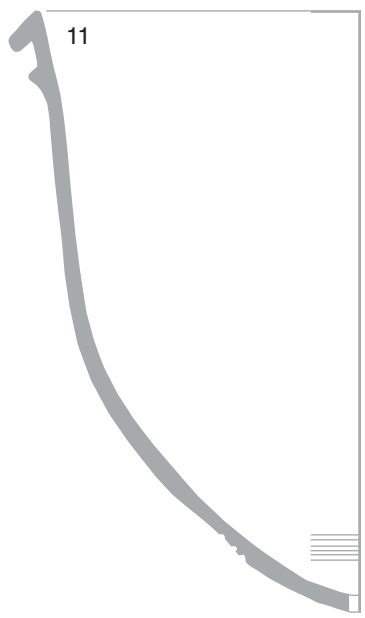
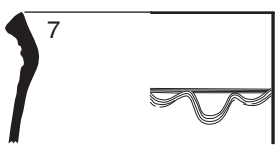
# PLATE 120

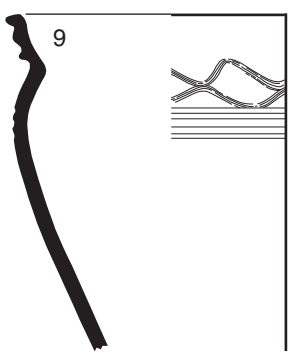
## 265 A 3

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | D | 103514 | A | IIa | 10YR 7/2 | ø rim : 475. Burial D.212 dug from IIa. *TD* 4, Pl. 19 : 9. |
| 2 | D | 103513 | A | IIa | 10YR 6/3 | ø rim : 540. Burial D.212 dug from IIa. *TD* 4, Pl. 19 : 8. |
| 3 | D | 103747 | A | IIc | 5Y 7/3 | ø rim : 580. Burial D.236 dug from IIc. |
| 4* | D | 103570 | A | IIc | 10YR 7/3 | ø rim : -. |
| 5* | D | 109646 | A | IIId | 2.Y 8/2 | ø rim : -. |
| 6* | D | 109645 | A | IVb | 5YR 8/4 | ø rim : ± 500. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 7 | N | H 700 : 3 | WF | VI | buff | ø rim : 372. *OIP* 129, Pl. 95 : 2. Bitumen on exterior. |
| 8 | N | D8 | WC-3 | VB | buff<br>S : cream | ø rim : ± 320. |
| 9 | N | 3P 355 | TB | VII 2 | tan | ø rim : 370. *OIP* 78, Pl. 84 : 21. |
| 10 | N | D535 | WC-3 | VB | green | ø rim : ± 440. |
| SUSIANA | | | | | | |
| 11 | S | GS-7233 | B | V | *brune* | ø rim : 460. Burial S.165 dug from V. *MDP* 47, Pl. 44 : 7. |

Continued on Pl. 121




20 cm

(Photos at various scales)

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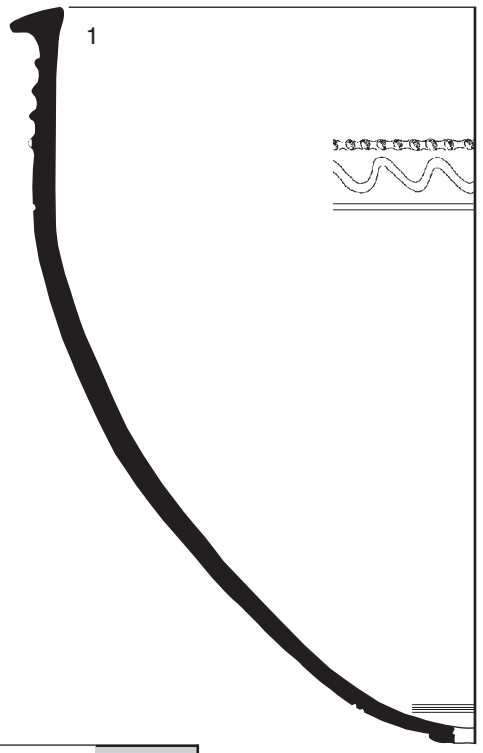
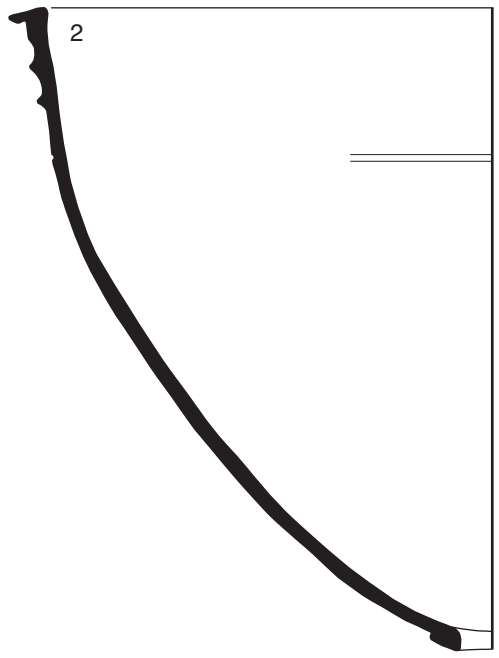
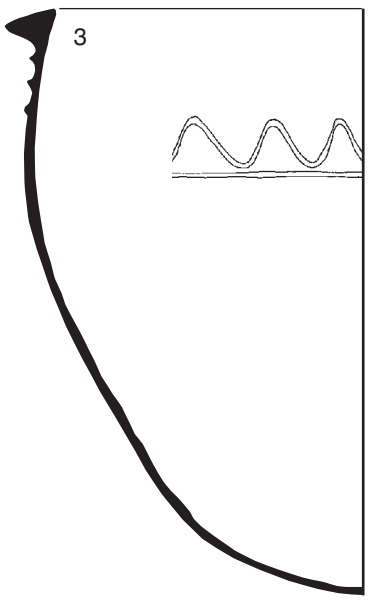
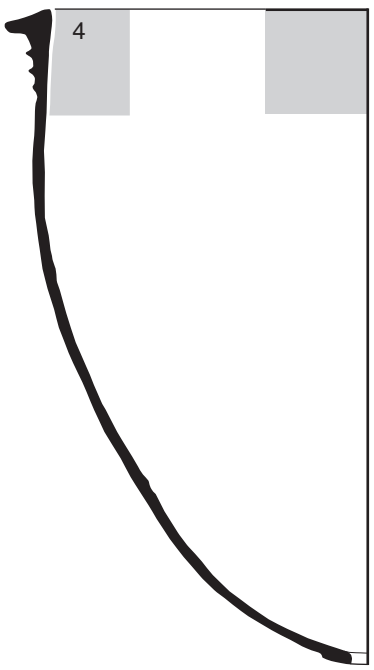
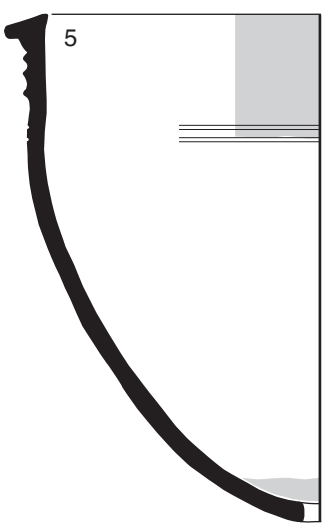


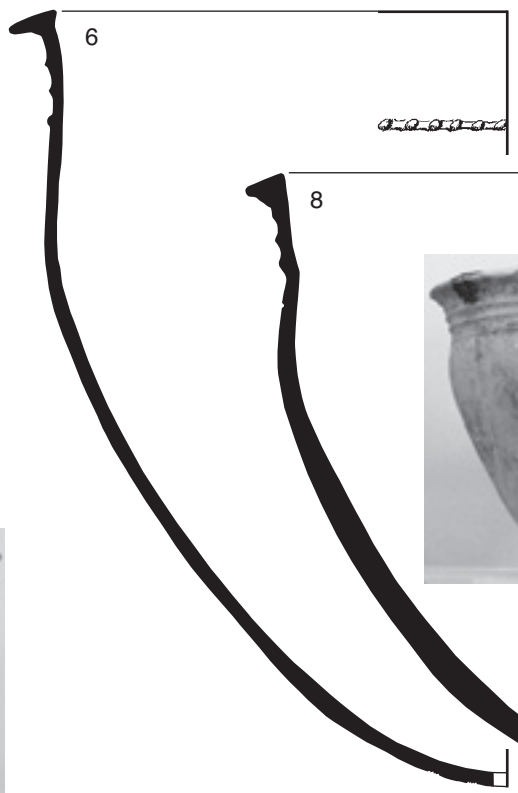

—1700



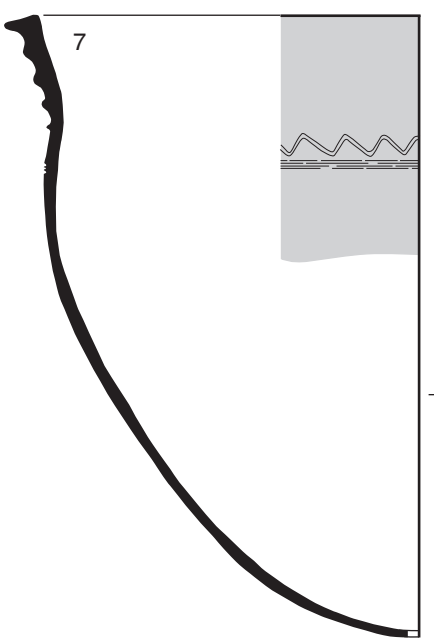




5



8




—1750

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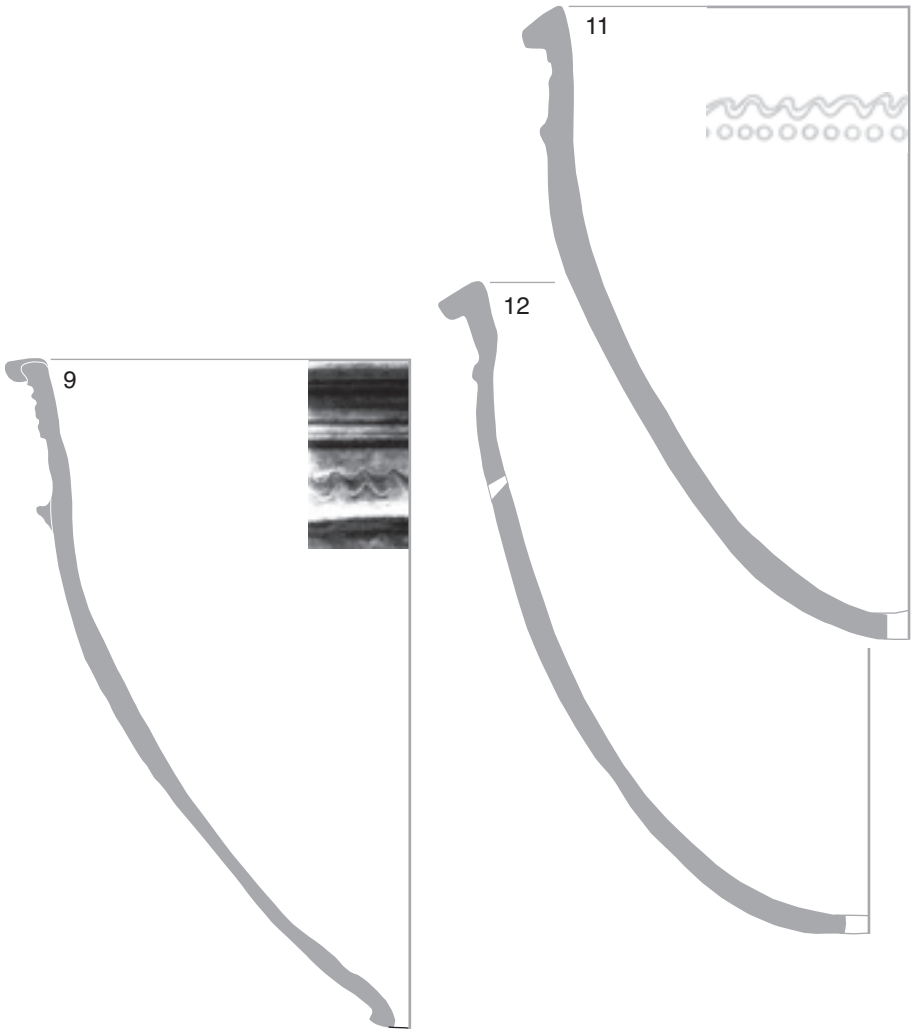
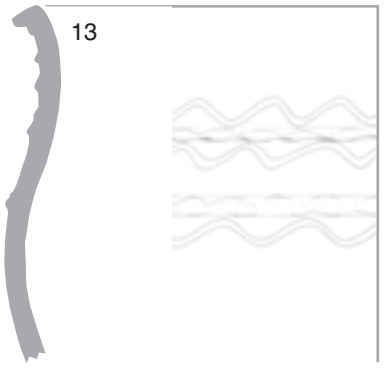
# PLATE 121

265 A 3

Continued from Pl. 120



| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | D | 101761 | A | Ie | 5Y 7/3 | ø rim : 610. Burial D.58 dug from Ie. |
| 2 | D | 101910 | A | Ie | 10YR 7/4 | ø rim : 645. Burial D.89 probably dug from Ie. |
| 3 | D | 101855 | A | Ig | 10YR 7/3 | ø rim : 468. Burial D.90 dug from Ig. |
| 4 | D | 101907 | A | Ig | 2.5YR 8/2 | ø rim : 478. Burial D.116 dug from Ig. |
| 5 | D | 100563 | A | Ii | 5Y 8/3 | ø rim : 420. Burial D.9. *TD* 1, Pl. 25 : 1. |
| 6 | D | 102289 | A | Ii | 5Y 7/3 | ø rim : 655. Burial D.148 dug from Ii. |
| 7 | D | 102513 | A | Ii | 10YR 6/3 | ø rim : 548. Burial D.169 dug from Ii. |
| 8 | D | 100648 | A | Ii | 5Y 8/4 | ø rim : 525. Burial D.7 dug from Ii. |
| MIDDLE EUPHRATES | | | | | | |
| 9 | M | III J2 NO17 | F | 0 | 2.5Y 8/2 | ø rim : 540. Burial III J2 NOT2. PONS 1999a, 207-208, Pl. 72 : 1 = JEAN-MARIE 1999, 196-7, Pl. 251 : 3 (*tombe* 1095). |
| 10 | M | III J2 NO32 | F | 1 | 5Y 8/2 | ø rim : 395. Burial III J2 NOT3. PONS 1999a, 208, Pl. 72 : 2 (No. 252140) = JEAN-MARIE 1999, 197, Pl. 253 : 9 (*tombe* 1102). |
| DIYALA | | | | | | |
| 11 | As | As. 31 P. 88a-b | O 33 : 3 | - | - | ø rim : 510. *OIP* 63, Pl. 190 : D.044.510 (Late Larsa). |
| 12 | Yel | y 296 | A | Va | *rossastro* | ø rim : 420. GABUTTI 2002-03, Pl. 50 : 11. Decoration not shown but similar to No. 13 below. |
| 13 | Yel | y 286 | B | Vb | *cuoio* | ø rim : 506. GABUTTI 2002-03, Pl. 52 : 6. |

Continued on Pl. 122

20 cm

(Photos at various scales)

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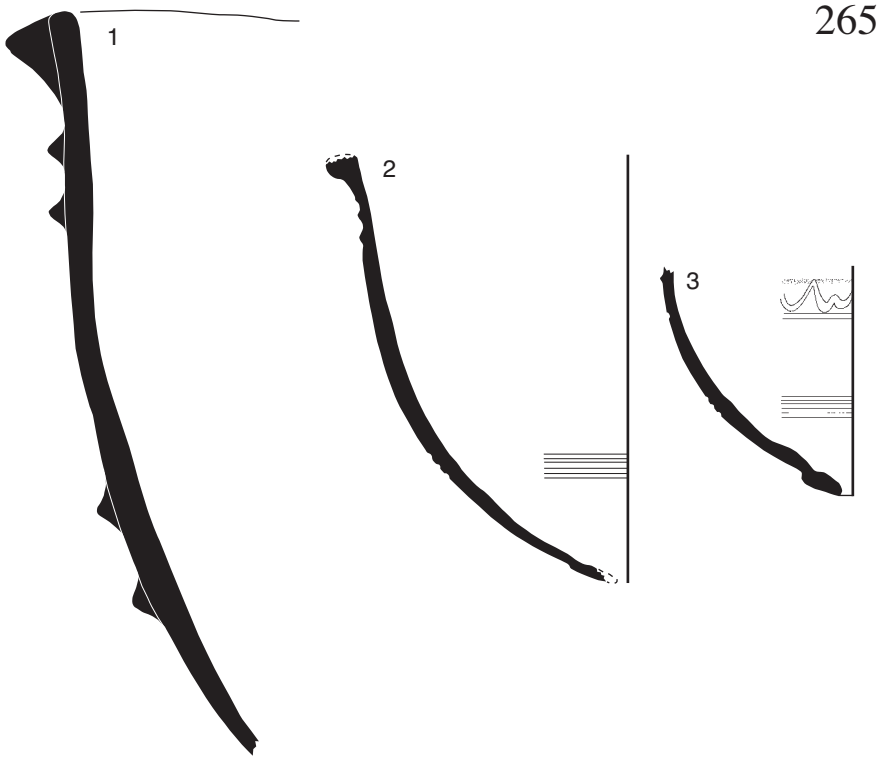
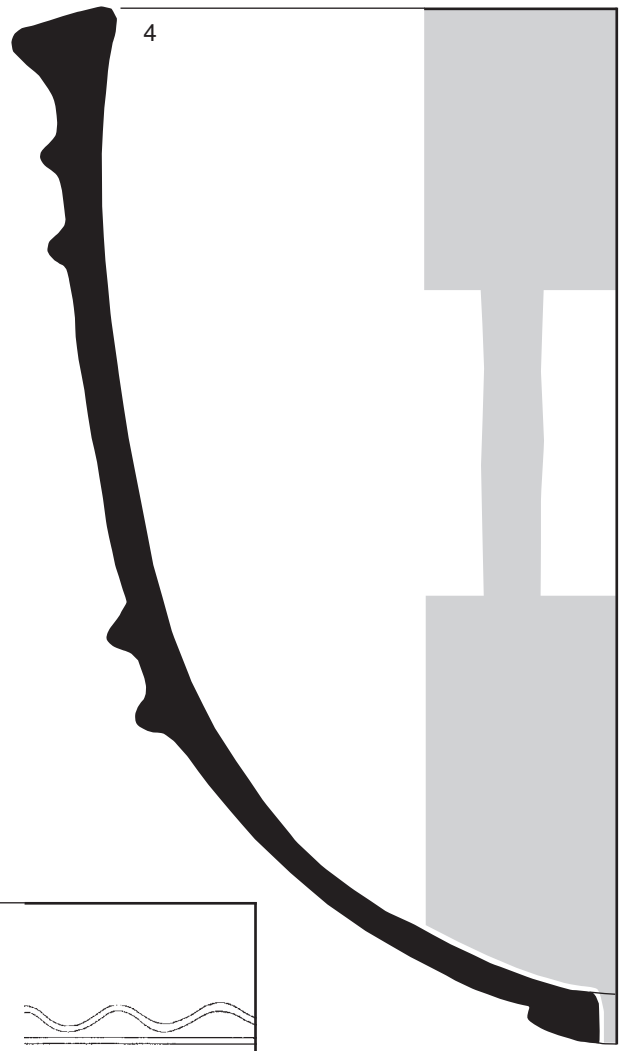
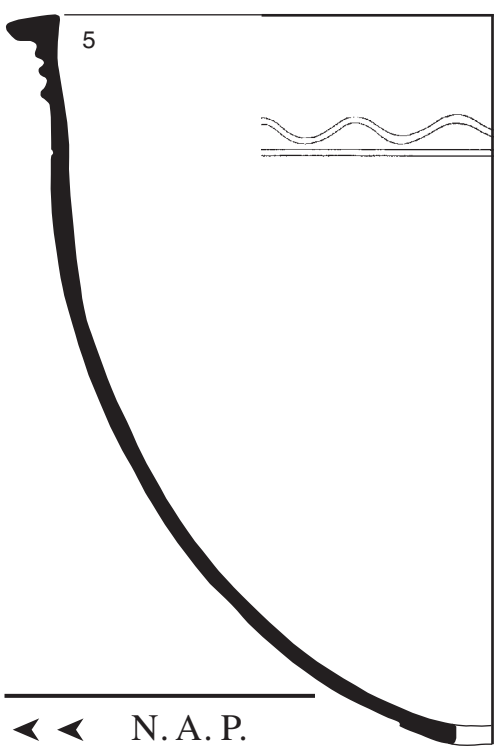
—1550

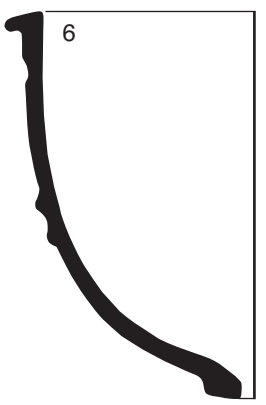
265 A 3

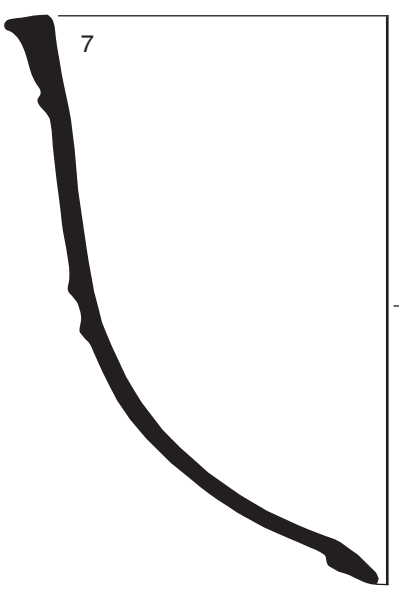



—1600




—1650

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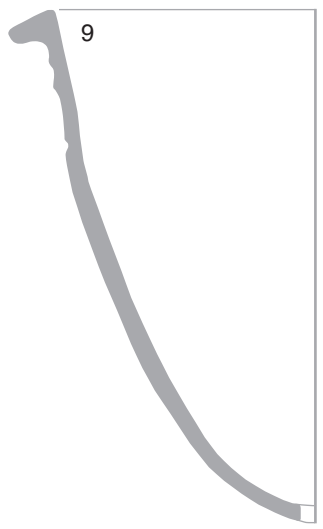


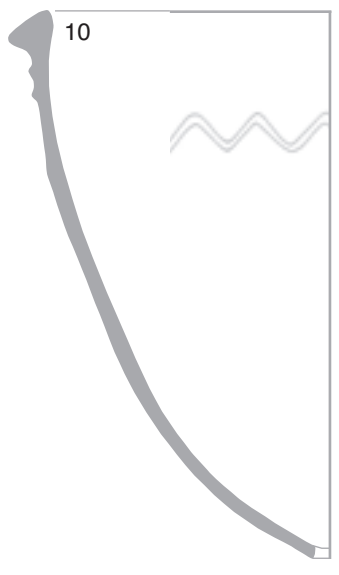


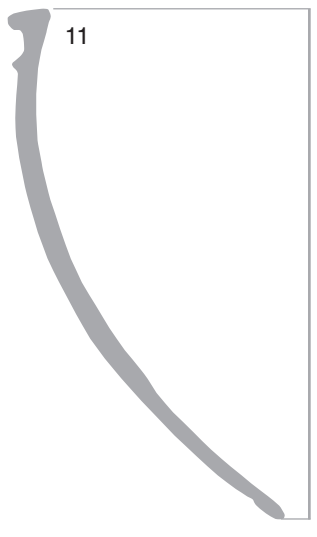

20 cm
(Photos at various scales)

# PLATE 122

## 265 A 3

Continued from Pl. 121

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 109584 | F | Ib | 5Y 5/3 | ø rim : -. |
| 2* | D | 107934 | F | Ib | 2.5Y 8/2 | ø rim : 398. |
| 3* | D | 107935 | F | Ib | 2.5Y 8/2 | ø rim : -. |
| 4 | D | 101828 | A | Ia | 5Y 7/4 | ø rim : 798. Burial D.74 dug from Ia. |
| 5 | D | 101535 | A | Ic | 2.5Y 8/4 | ø rim : 647. Burial D.39 dug from Ic SALLABERGER 1996, Pl. 5 : 4. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 6 | N | 3 P 149 | TA | X | tan | ø rim : 283. Incised wavy line above lower ridges. *OIP* 78, Pl. 93 : 6. |
| 7 | N | A 2144 | WB | IV 6 | - | ø rim : 512. |
| DIYALA | | | | | | |
| 8 | Yel | y 386 | B | IIIa | - | ø rim : 530. GABUTTI 2002-03, Pl. 46 : 1. |
| 9 | Yel | y 479 | B | IVa | - | ø rim : 400. GABUTTI 2002-03, Pl. 49 : 3. |
| 10 | Yel | y 185 | B | IVb | *giallo-verdastro* | ø rim : 423. GABUTTI 2002-03, Pl. 45 : 2. |
| 11 | Yel | y 395 | B | IVb | *cuoio rosato* | ø rim : 400. GABUTTI 2002-03, Pl. 49 : 2. |
| 12 | Yel | y 267 | A | IVb-Va | *giallo-verdastro* | ø rim : 328. GABUTTI 2002-03, Pl. 54 : 2. |

Continued on Pl. 123

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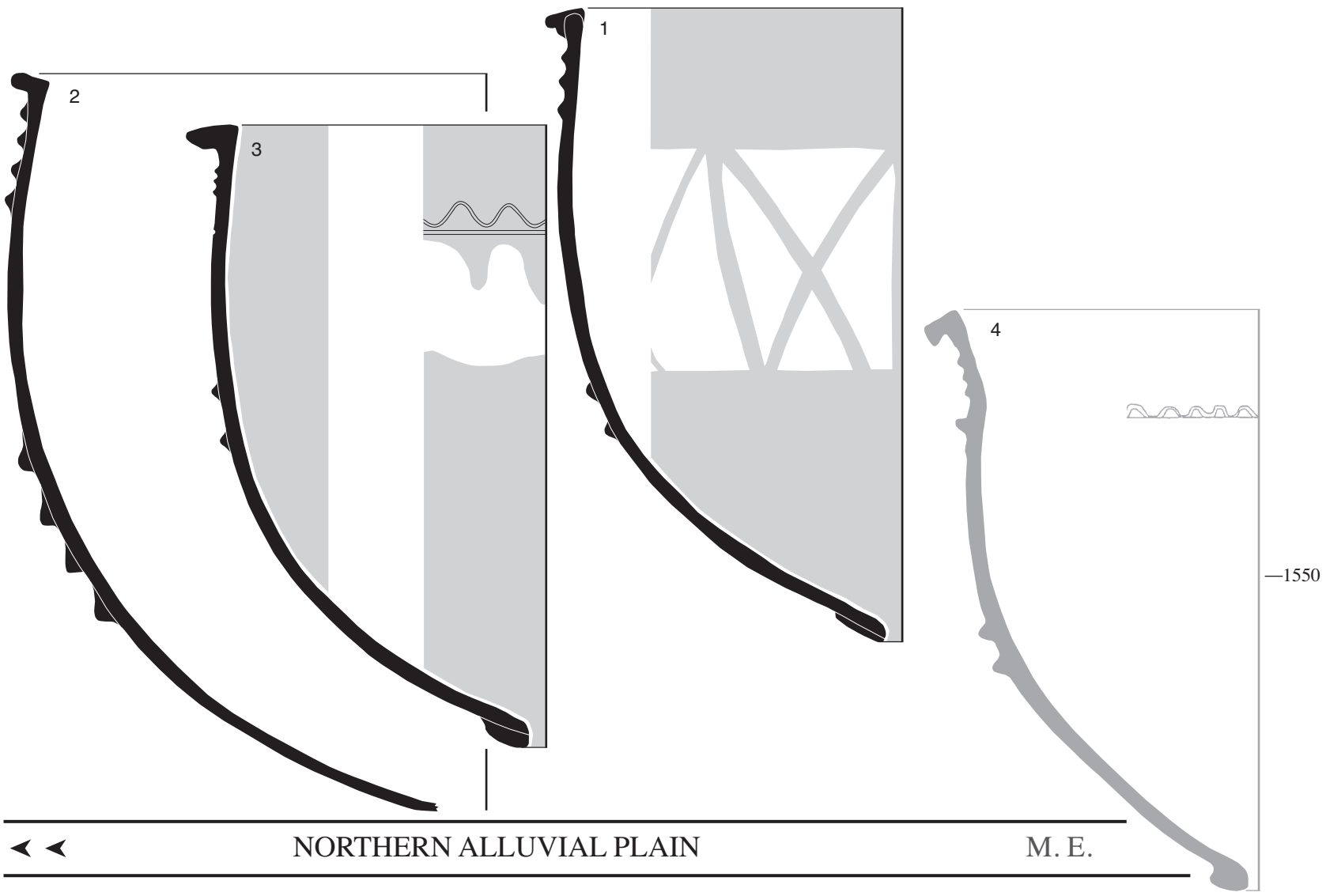
—1450




—1500

—1550

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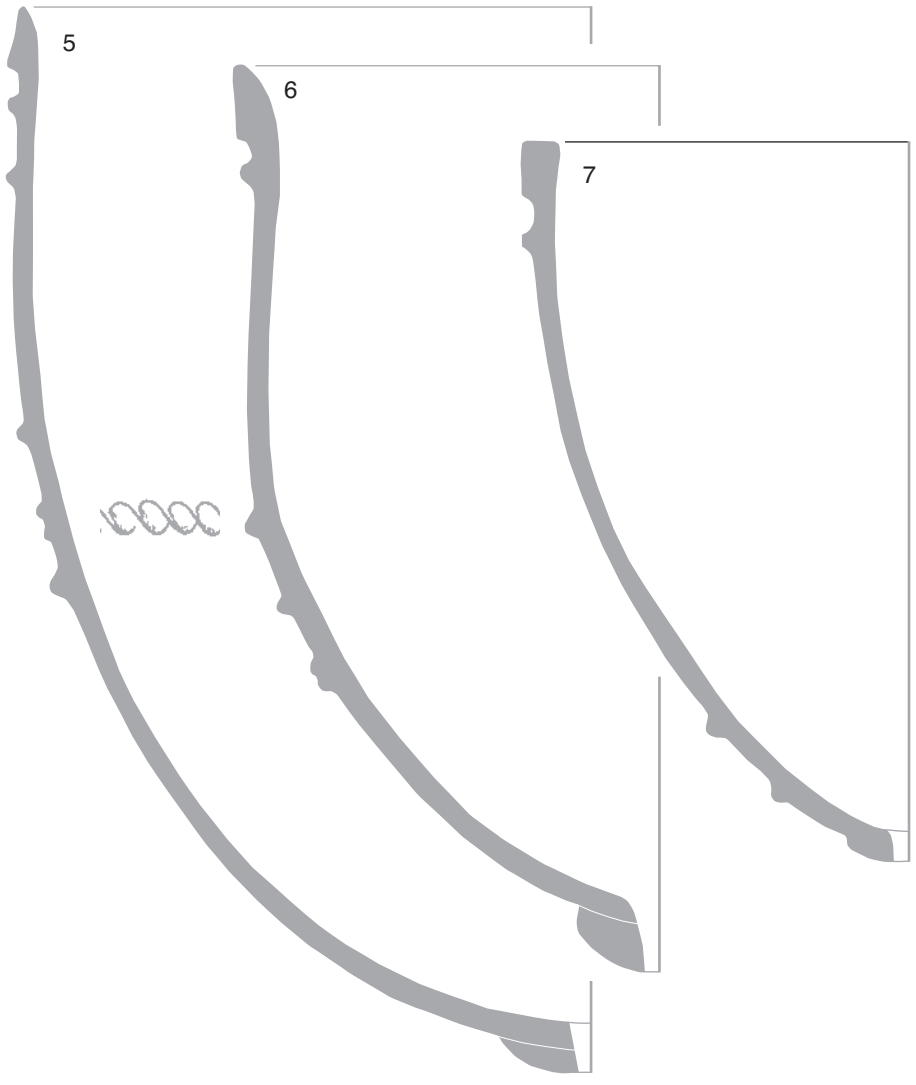


# PLATE 123

## 265 A 3

Continued from Pl. 122

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | D | 105809 | E | IIIb | 5Y 6/3 | ø rim : 596. Burial D.326 dug from IIIb. *MHEM* 1, Pls. 24 and 40 : 5. |
| 2 | D | 103934 | E | IIId | 5Y 6/4 | ø rim : 790. Base broken. *MHEM* 1, Pl. 41 : 3. |
| 3 | D | 105794 | E | IIId | 10YR 6/3 | ø rim : 600. Burial D.322 dug from IIId. *MHEM* 1, Pls. 22 and 40 : 6. |
| MIDDLE EUPHRATES | | | | | | |
| 4 | Din | V 205 | *Bât.* 2 | $3B_1$ | *beige* | ø rim : 560. *Haradum* 1, fig. 103 : 2. |
| SUSIANA | | | | | | |
| 5 | S | GS-6884 | A | XII *récent* | *jaunâtre* | ø rim : 750. Burial S.97 probably dug from XII *récent*. *MDP* 47, Pl. 44 : 3. |
| 6 | S | GS-6885 | A | XII *récent* | *jaunâtre* | ø rim : 555. Burial S.95 probably dug from XII. *MDP* 47, Pl. 44 : 4. |
| 7 | S | GS-6886b | A | XII *récent* | *jaunâtre* | ø rim : 505. Burial S.90 dug from XII *récent*. *MDP* 47, Pl. 44 : 5. |

Continued on Pl. 124

20 cm

(Photos at various scales)

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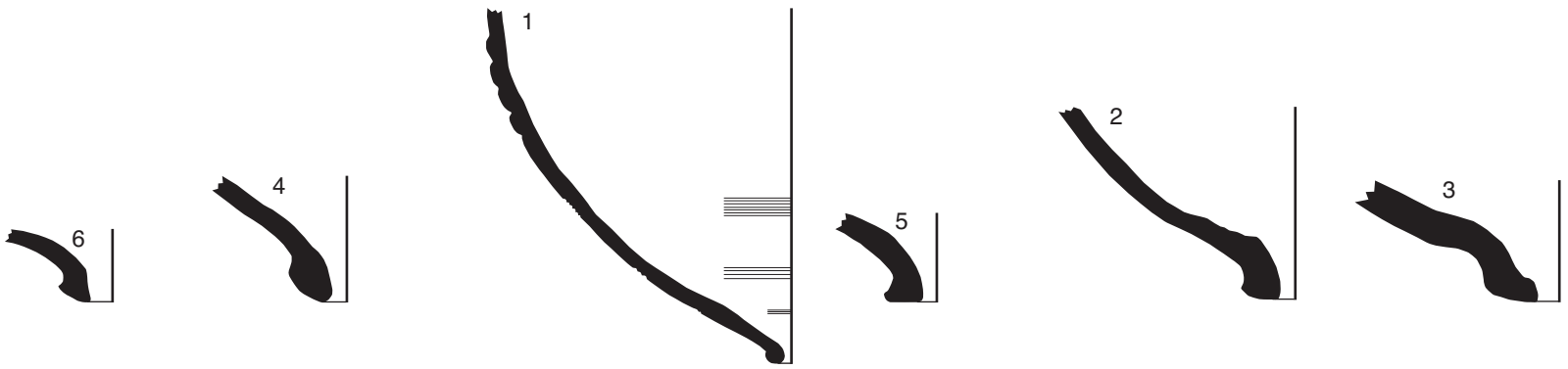
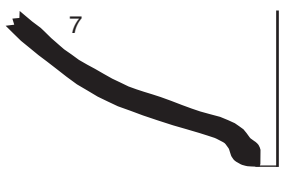
—1200




—1300

—1400

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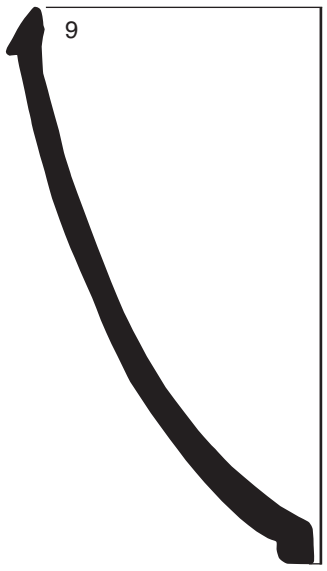
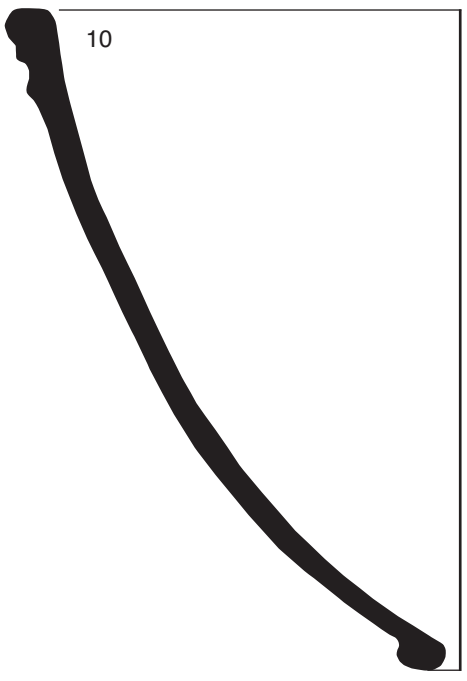
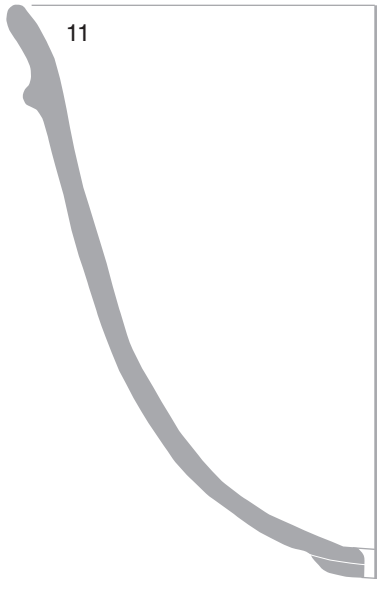


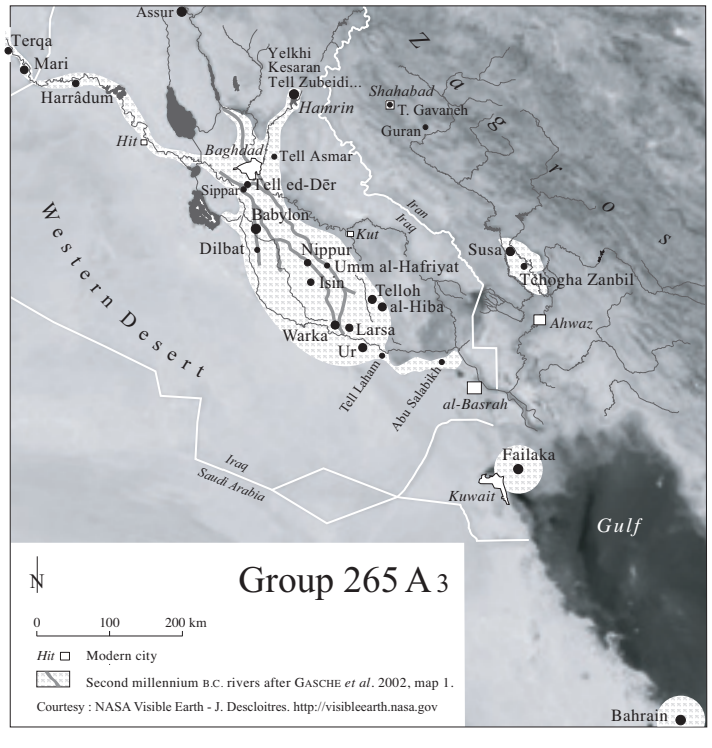



# PLATE 124



Continued from Pl. 123

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 107379 | E3 | 0 | 7.5YR 6/6 | ø rim : -. Pit 14 dug from Ensemble 0. |
| 2* | D | 103226 | E | 0 | 5Y 7/2 | ø rim : -. Pit 1 dug from Ensemble 0. |
| 3* | D | 107661 | E3 | 0 | 10YR 8/3 | ø rim : -. Pit 1 dug from Ensemble 0. |
| 4* | D | 107657 | E3 | 0 | 7.5YR 8/4 | ø rim : -. Pit 1 dug from Ensemble 0. *NAPR* 6, Pl. 17 : 8. |
| 5* | D | 107656 | E3 | 0 | 5Y 8/2 | ø rim : -. Pit 1 dug from Ensemble 0. |
| 6* | D | 107659 | E3 | 0 | 2.5Y 8/2 | ø rim : -. Pit 1 dug from Ensemble 0. |
| 7* | D | 107481 | E3 | Prob. Ia0 | - | ø rim : -. *NAPR* 6, Pl. 16 : 7. |
| 8* | D | 107371 | E3 | Ia2 | 2.5Y 7/2 | ø rim : -. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 9 | N | B 916 | WB | II | - | ø rim : 415. FRANKE 1978, fig. 75 :1. |
| 10 | N | - | WB | III | buff | ø rim : 600. Burial 36, lower burial jar. |
| SUSIANA | | | | | | |
| 11 | S | GS-6889 | A | XI *ancien* | - | ø rim : 490. *MDP* 47, Pl. 44 : 2. |




20 cm

(Photos at various scales)

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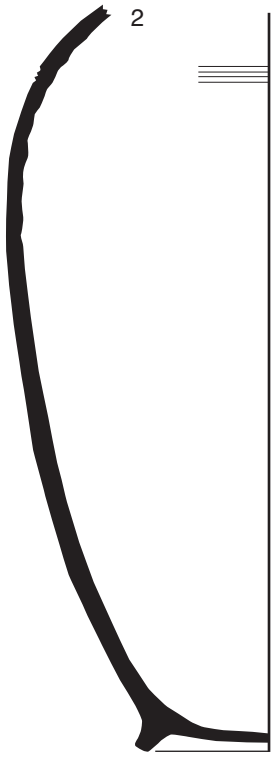
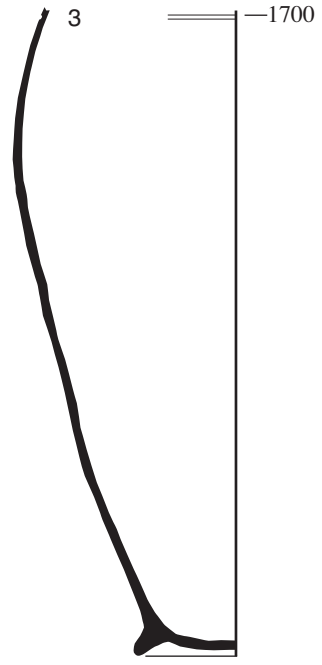
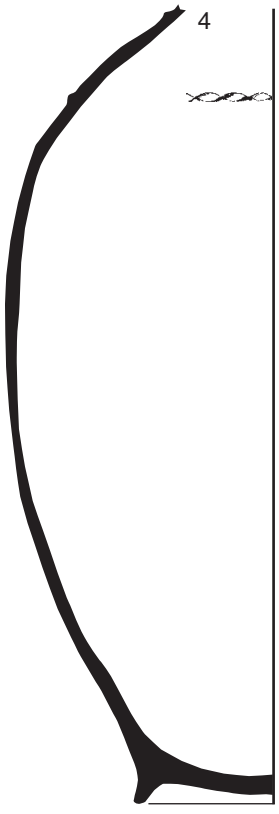
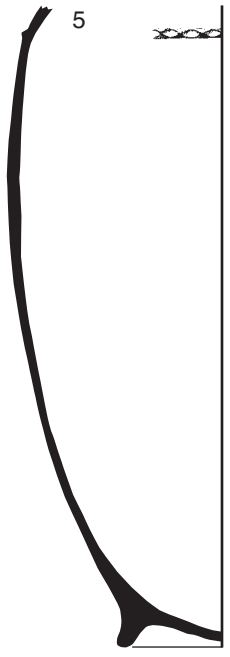
1



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# PLATE 125

## 270 A 2

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | D | 101996 | A | Ie | 2.5Y 6/6 | ø rim : 190. SALLABERGER 1996, Pl. 3 : 1. |
| 2 | D | 101875 | A | Ie | 10YR 7/3 | ø rim : -. Burial D.89 probably dug from Ie. |
| 3 | D | 101930 | A | Ig | 10YR 7/3 | ø rim : -. Burial D.87 dug from Ig. |
| 4* | D | 102813 | A | Ii | 2.5Y 7/4 | ø rim : -. |
| 5* | D | 102765 | A | Ii | 5YR 6/4 | ø rim : -. Burial D.190 dug from Ii. |

Continued on Pl. 126

20 cm

(Photos at various scales)

➤ ➤

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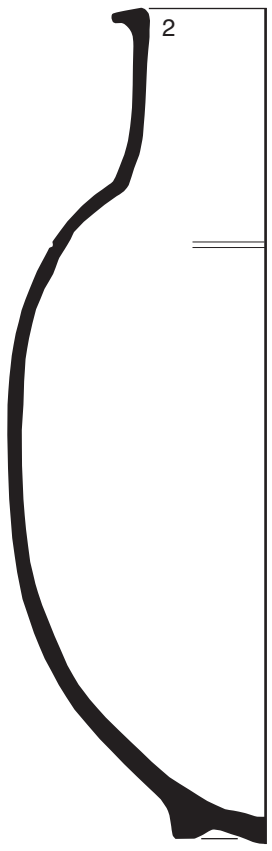
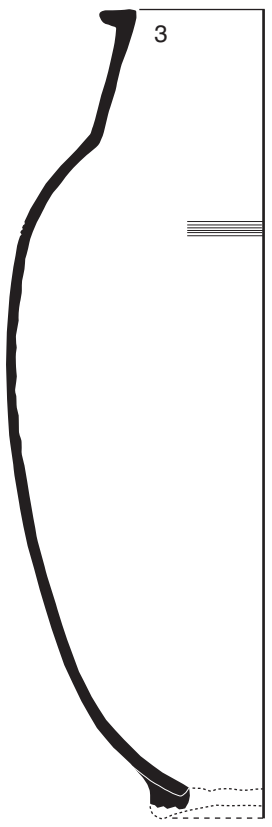
—1500

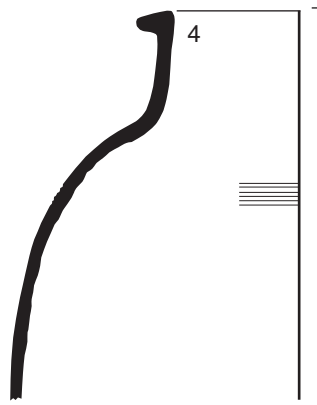
270 A 2

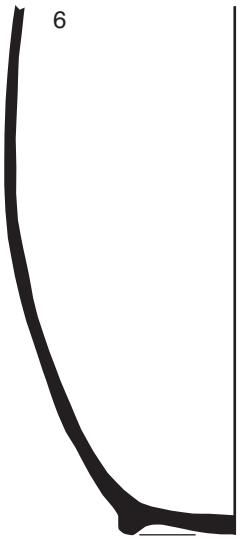
—1600




3



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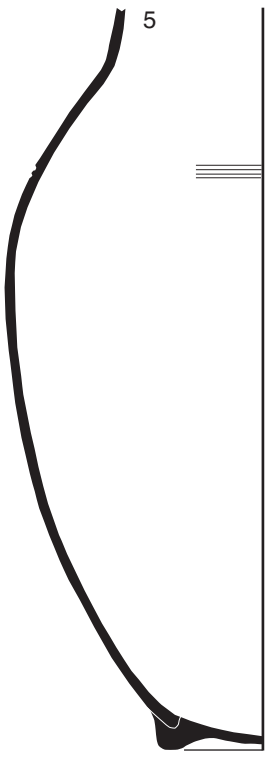
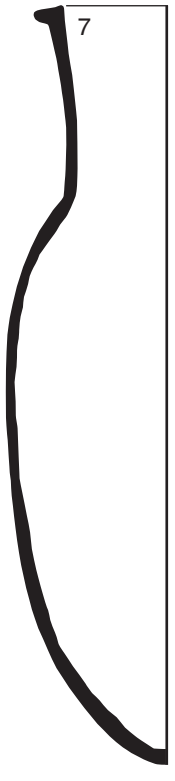
270 A 2 | 270 A 3



N. A. P. | NORTHERN ALLUVIAL PLAIN

# PLATE 126

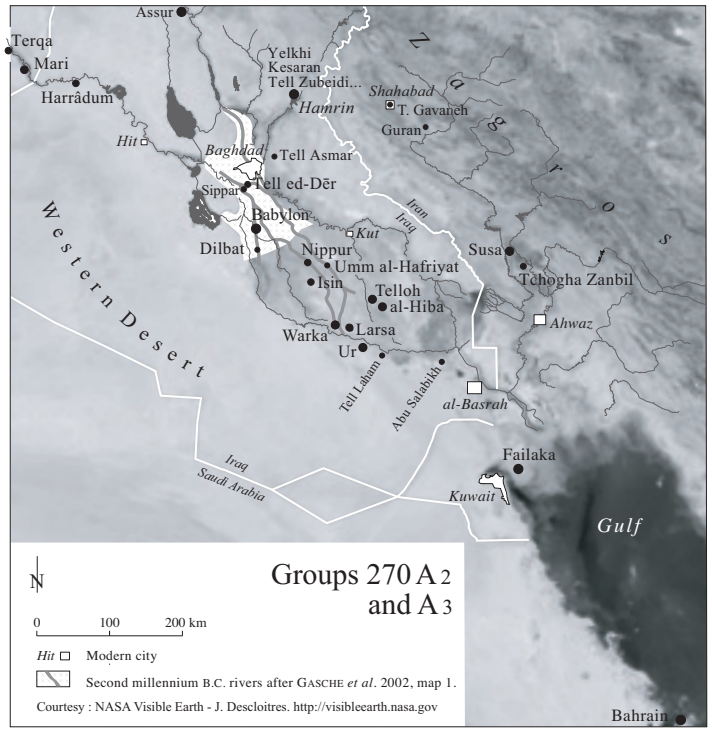
## 270 A 2

Continued from Pl. 125

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 104000 | E | IIIb | 5YR 6/4 | ø rim : 180. *MHEM* 1, Pl. 39 : 12. |
| 2 | D | 100322 | A | Ia | 2.5YR 6/4 | ø rim : 200. *TD* 1, Pl. 23 : 1. |
| 3 | D | 101326 | A | Ia | 5Y 7/3 | ø rim : 218. |
| 4* | D | 105837 | E | VIb | 2.5Y 8/2 | ø rim : 215. |
| 5* | D | 101321 | A | Ia | 2.5YR 6/4 | ø rim : -. |
| 6* | D | 100851 | A | Ic | 5Y 8/4 | ø rim : -. |

## 270 A 3

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 7 | D | 101318 | A | Ic | 5YR 6/4 | ø rim : 172. *TD* 2, Pl. 24 : 3. |




20 cm

(Photos at various scales)

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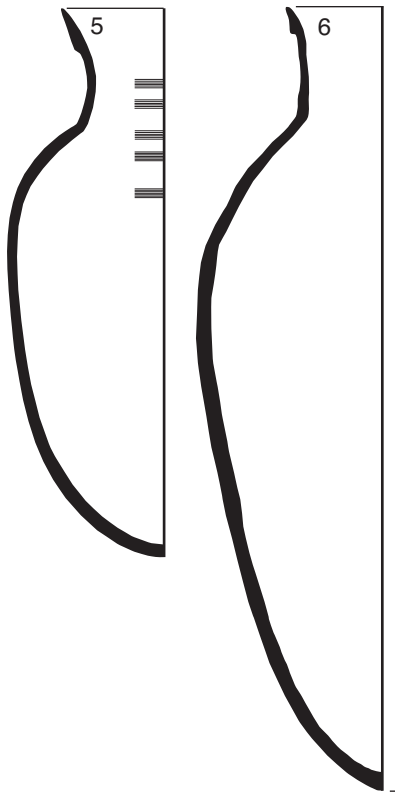
270 B 3

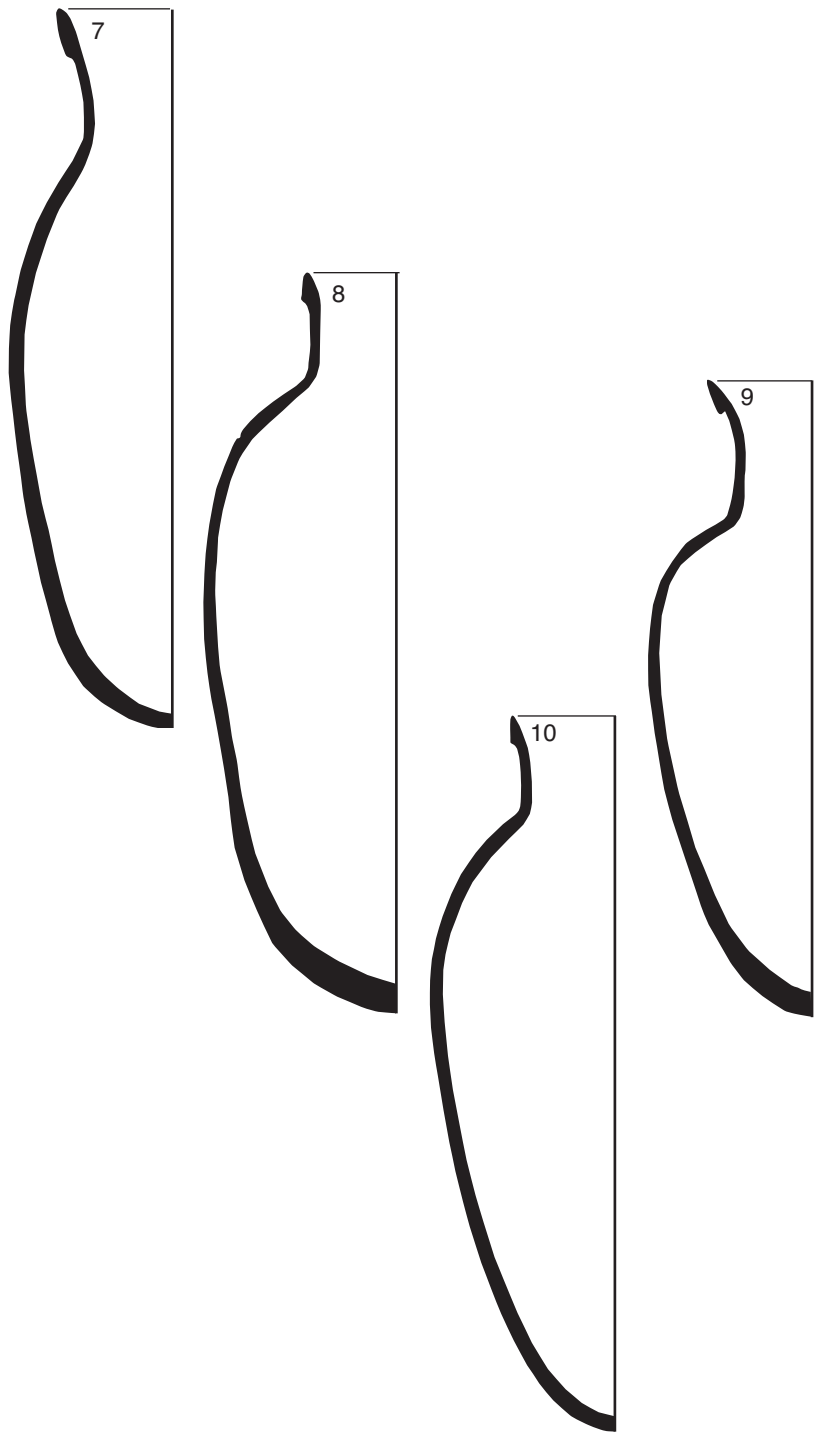
270 C 3

—1700

C.P.U.




—1800




—1900

S. A. P.

SOUTHERN ALLUVIAL PLAIN

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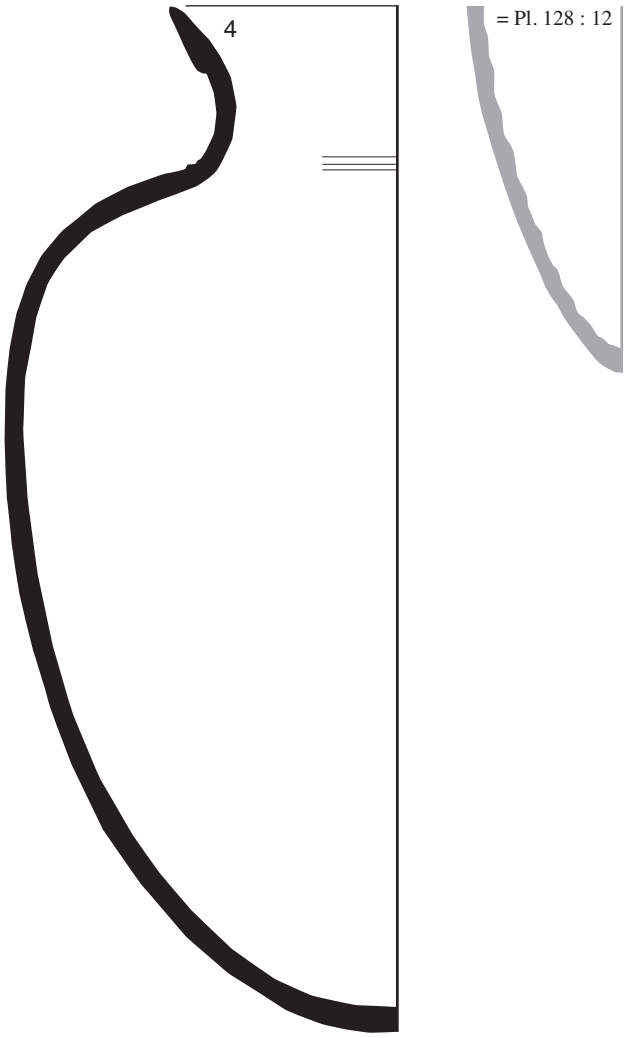
## 270 C 3




## 270 B 3

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | N | 2P 300 | TB | II 1 | buff | ø rim : 137. *OIP* 78, Pl. 87 : 2. |
| 2 | I | IB 1934 | *SOA* | 4,67m | | ø rim : 128. Near Burial 156.[1] In *Isin* 4, 40, this vessel is described as belonging to the burial. |
| 3 | N | 2P 460 | TB | II 2 | buff | ø rim : 138. *OIP* 78, Pl. 87 : 1. |

## 270 C 3

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 4 | W | 20117 | Sînkāšid | 3 | *rot-grünlich* | ø rim : 300. VAN ESS 1988a, fig. 25 : 155 [read 154]. |
| 5 | W | 20029d | Sînkāšid | 0[2] | *rötlichbraun* | ø rim : 139. Disturbed Burial 50, under Room 16 of the palace. *AUWE* 10, Pl. 28 : d = VAN ESS 1988a, fig. 24 : 150 = *UVB* 18, 33, Pl. 23 : b. |
| 6 | H | 1 H 92 | B | - | gray-green | ø rim : 132. Burial 1 HB 2. |
| 7 | W | 15255a | Pb 13-1 | | *braungrau* | ø rim : 154. Burial 45. *AUWE* 10, Pl. 24 : a = VAN ESS 1988b, fig. 6 : 28. |
| 8 | H | 5 H 12 | B | - | 5Y 7/3 | ø rim : 132. Burial 5 HB 5. |
| 9 | W | 19100a | O 10 | - | - | ø rim : 154. Burial 38. *AUWE* 10, 20, Pl. 21 : a. |
| 10 | N | 3P 53 | TB | IV | buff | ø rim : 138. Burial 3B 22. *OIP* 78, Pl. 87 : 12. |

DIYALA

See Pl. 128 : 12

1) According to expedition records.

2) See Pl. 8, note 2).

270 B 3 and 270 C 3 continued on Pl. 128

C.P.U. = Chronological Position Uncertain

20 cm

(Photos at various scales)

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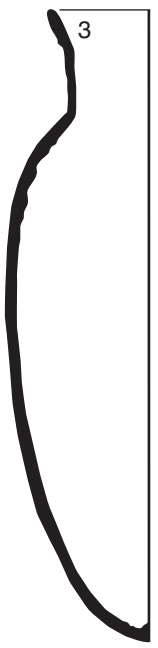
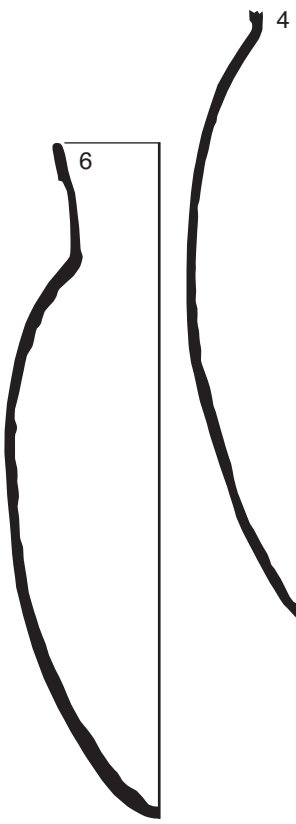
270 B 3

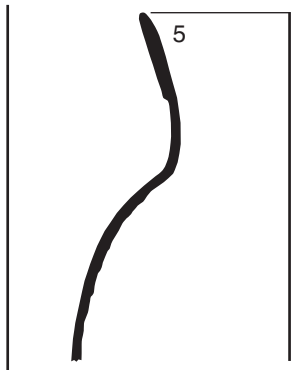
270 C 3

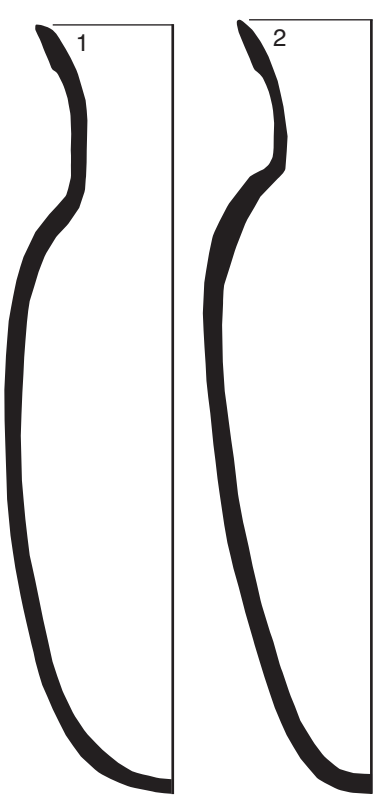
—1500

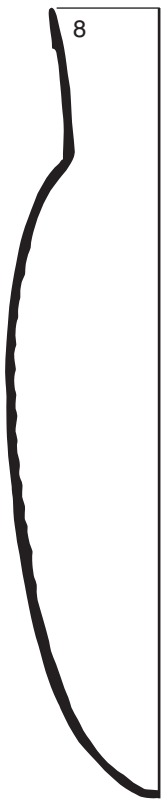


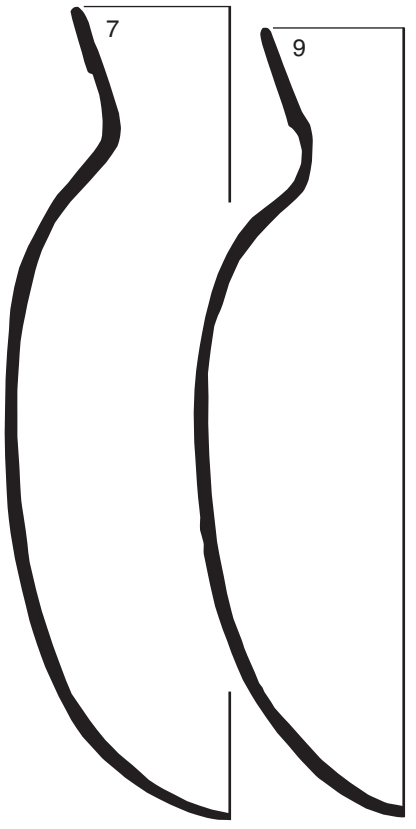
—1600




—1700

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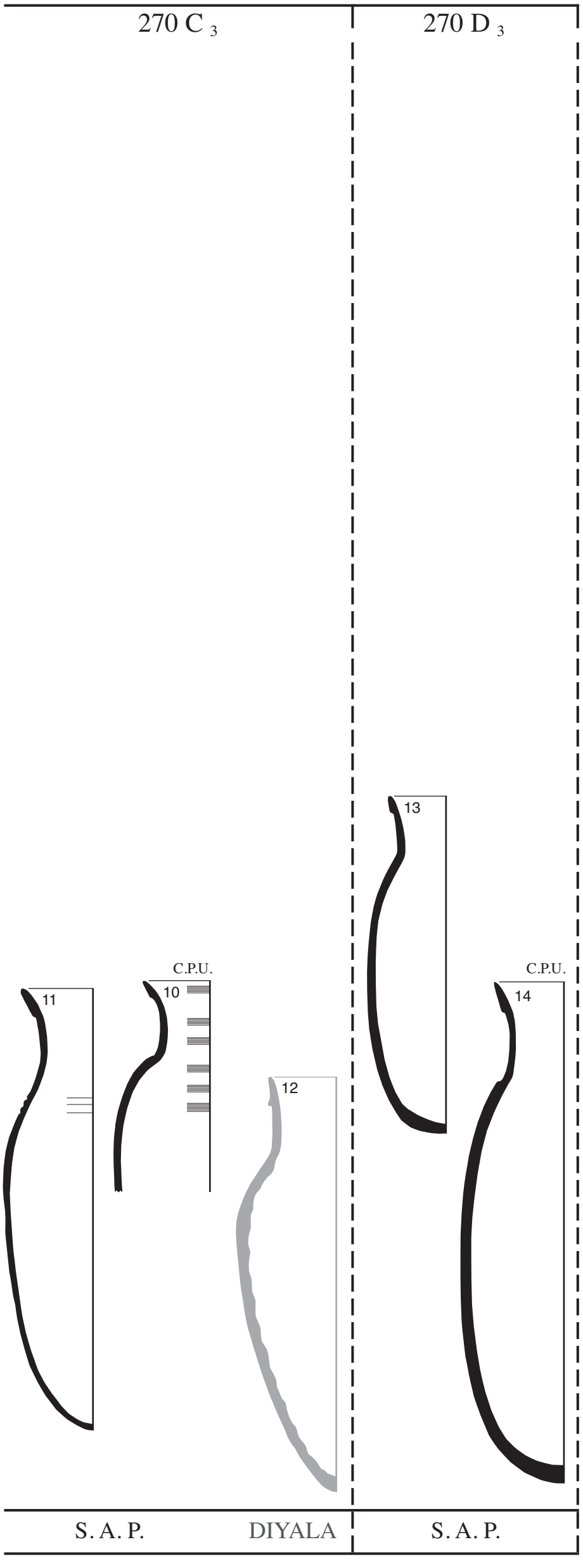
# PLATE 128




## 270 B 3

270 B 3 and 270 C 3 continued from Pl. 127

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | L | 59.62 | Mais. 59 | | *jaune* | ø rim : 181. Burial beneath Room 17. Exc. Huot. CALVET 2003, fig. 69. |
| 2 | L | 59.61 | Mais. 59 | | *jaune* | ø rim : 176. Burial beneath Room 17. Exc. Huot. CALVET 2003, fig. 69. |

## 270 C 3

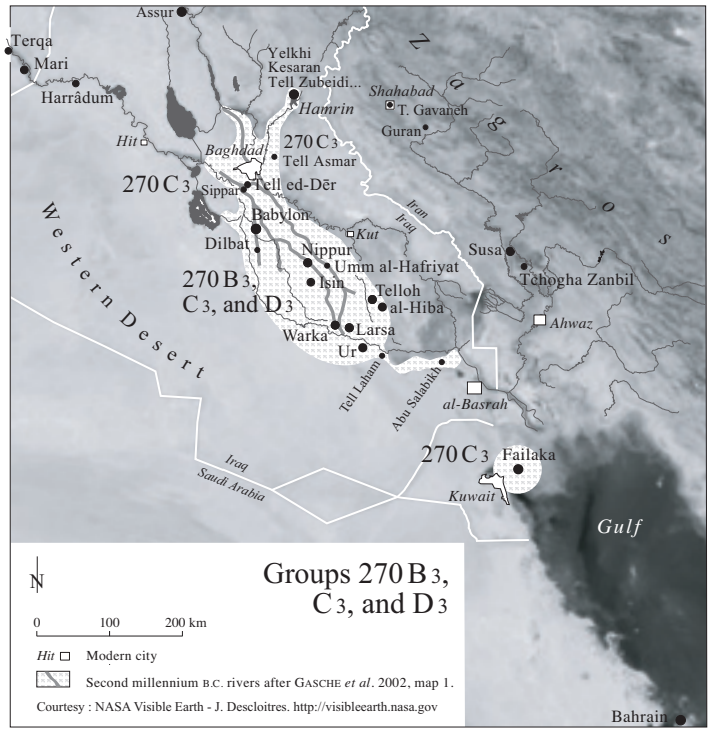
| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 3* | D | 105822 | E | IIId | 10YR 7/3 | ø rim : 130. Burial D.328 dug from IIId. *MHEM* 1, Pls. 16 and 39 : 1. |
| 4* | D | 101327 | A | Ia | 5YR 6/6 | ø rim : -. |
| 5* | D | 101353 | A | Ia | 5Y 7/4 | ø rim : 200. |
| 6 | D | 101052 | A | Ic | 7.5YR 6/4 | ø rim : 137. Burial D.16 dug from Ic. |
| 7 | D | 101995 | A | Ie | 10YR 6/4 | ø rim : 200. SALLABERGER 1996, Pl. 3 : 2. |
| 8* | D | 101880 | A | Ie | 2.5YR 5/4 | ø rim : 147. |
| 9 | D | 101998 | A | Ie | 5YR 6/6 | ø rim : 192. *TD* 2, Pl. 24 : 2. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 10 | W | 20029b | Sînkāšid | 0 [1] | *grünlich* | ø rim : 140. Disturbed Burial 50, under Room 16 of the palace. *AUWE* 10, Pl. 28 : b = VAN ESS 1988a, fig. 24 : 149. |
| 11 | N | 11 N 99 | WB | IV 2 | reddish S. : cream | ø rim : 154. Burial 3a dug from IV 2 = Burial 3 in *OIC* 22, 115, fig. 86 : 1. [2] |
| DIYALA | | | | | | |
| 12 | As | As. 30 P. 120 | P 30 : 1 | - | - | ø rim : 142. *OIP* 63, Pl. 184 : C.547.640b (Ibalpiel I well, Late Larsa). |

## 270 D 3

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 13 | I | IB 1590b | NOA IV | 6,57m | 10YR 8/4 S : 2.5Y 8/2 | ø rim : 122. Burial 115, cf. *Isin* 3, 38 and Plan 12 for location (Room 13). |
| 14 | W | 20029q | Sînkāšid | 0 [1] | *hellgelb* | ø rim : 145. Disturbed Burial 50, under Room 16 of the palace. *AUWE* 10, Pl. 29 : q = VAN ESS 1988a, fig. 26 : 156 = *UVB* 18, 33, Pl. 23 : a. |

1) See Pl. 8, note 2).
2) renumbered and now attributed to Level IV 2.

C.P.U. = Chronological Position Uncertain




20 cm

(Photos at various scales)

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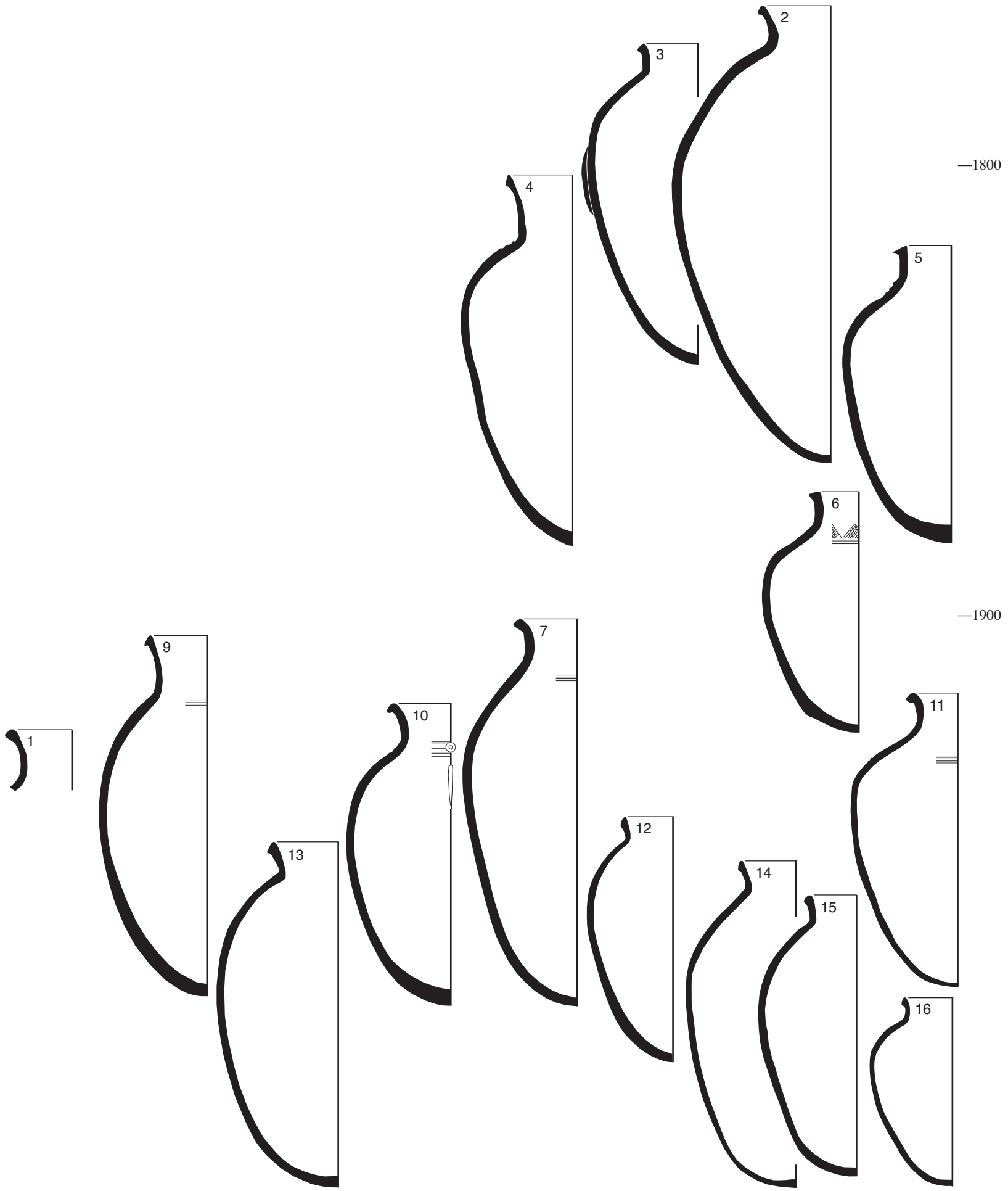
270 E 3




—1800

—1900

N. A. P.

SOUTHERN ALLUVIAL PLAIN

—2000

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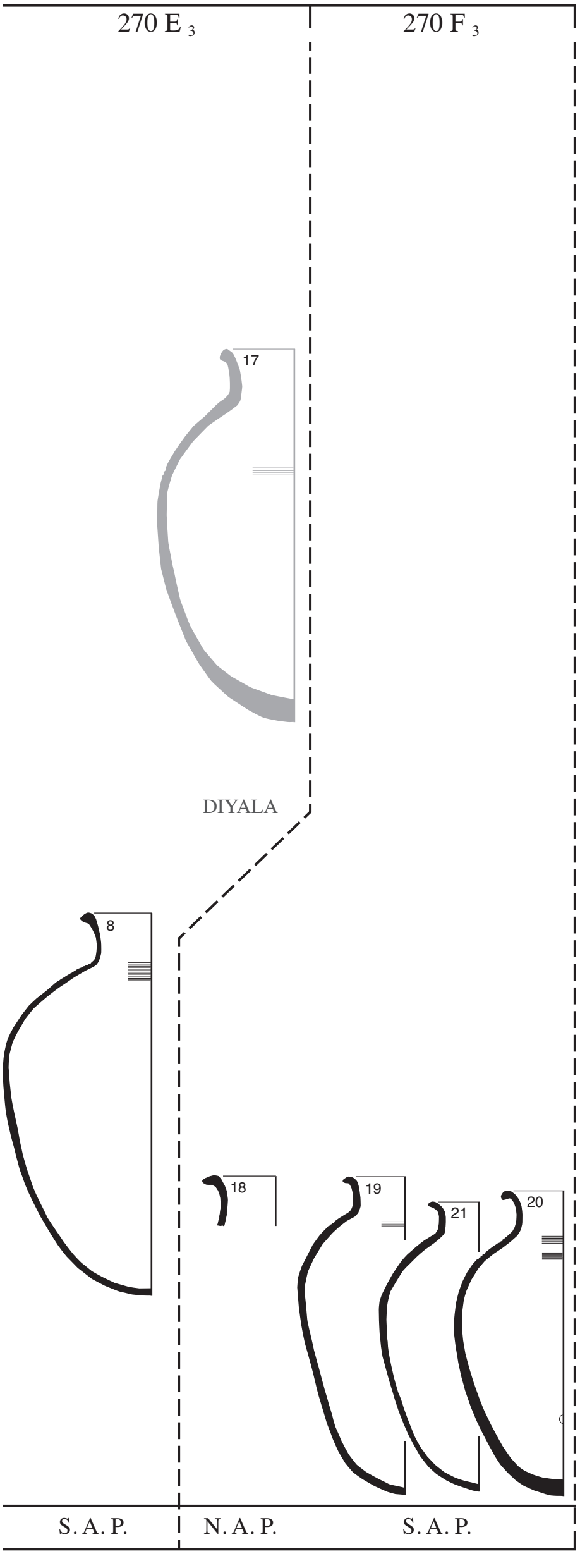
# PLATE 129

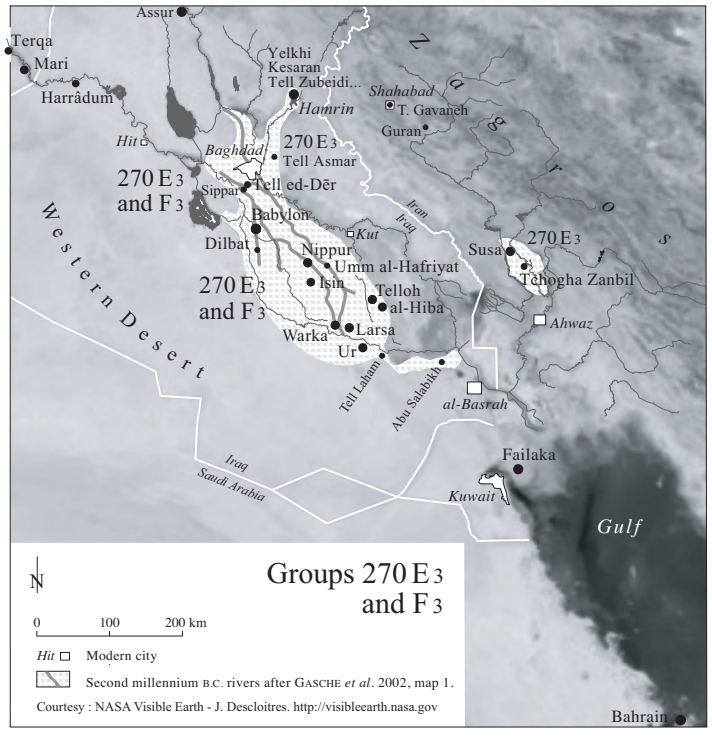



## 270 E 3

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 102523 | A | IIId | 7.5YR 6/4 | ø rim : 150. *TD* 4, Pl. 10 : 17. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 2 | N | C 1008 | WA | VIA | - | ø rim : 156. |
| 3 | U | 1 UmH 194 | A | II | 2.5Y 8/2 | ø rim : 130. Burial 14 dug from II. Ancient repair with clay. |
| 4 | H | 5 H 11 | B | I | 5YR 6/4 | ø rim : 142. Burial 5 HB 7. |
| 5 | H | 5 H 10 | B | I | 5Y 7/3 | ø rim : 126. Burial 5 HB 1 |
| 6 | W | 14547b1 | Pb 13-2 | - | *grau* | ø rim : 110. Burial 12. *AUWE* 10, Pl. 7 : b1 = VAN ESS 1988b, fig. 3 : 7. |
| 7 | N | 3P 58 | TB | IV 2 | buff | ø rim : 140. Burial 3B 20. *OIP* 78, Pl. 87 : 4. |
| 8 | N | 17 N 16 | WC-3 | VA | pink S : cream | ø rim : 148. Burial 100 dug from VA. |
| 9 | N | 3P 59 | TB | IV 2 | buff | ø rim : 132. Burial 3B 20. *OIP* 78, Pl. 87 : 9. |
| 10 | W | 24996 | P 6 *Areal* 1 | - | *rötlich* S : *grün-weißlich* | ø rim : 132. Burial 33. *AUWE* 10, Pl. 16 : h = VAN ESS 1993, fig. 10 : 147. |
| 11 | W | - | P 6 *Areal* 1 | - | *bräunlich-ziegelrot* | ø rim : 103. Burial 33. *AUWE* 10, Pl. 16 : g = VAN ESS 1993, fig. 10 : 146. |
| 12 | N | 3P 270 | TB | VI 1 | buff | ø rim : 112. *OIP* 78, Pl. 87 : 11. |
| 13 | N | 3P 351 | TB | VII 1 | buff | ø rim : 124. *OIP* 87 : 8. |
| 14 | N | 17 N 93 | WC-3 | VB | pink S : cream | ø rim : 127. Burial 104 dug from VB. |
| 15 | N | 14 N 399 | WC-3 | VB | yellow | ø rim : 115. Burial 80 dug from VB. |
| 16 | N | 17 N 75 | WC-3 | VB | pink S : buff | ø rim : 104. Burial 104 dug from VB. |
| DIYALA | | | | | | |
| 17 | Yel | HY 474 | B | VIa | *cuoio rosato* | ø rim : 154. GABUTTI 2002-03, Pl. 99 : 1. |

## 270 F 3

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 18* | D | 102557 | A | IVb | 5YR 6/6 | ø rim : 160. *TD* 4, Pl. 8 : 10. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 19 | N | 14 N 149 | WC-3 | VB | red | ø rim : 131. Burial 59 dug from VB. |
| 20 | W | 24931 | P 6 *Areal* 1 | - | *rötlich* | ø rim : 130. Burial 33. *AUWE* 10, Pl. 16 : i = VAN ESS 1993, fig. 10 : 148. |
| 21 | N | 14 N 401 | WC-3 | VB | - | ø rim : 109. |




20 cm

(Photos at various scales)

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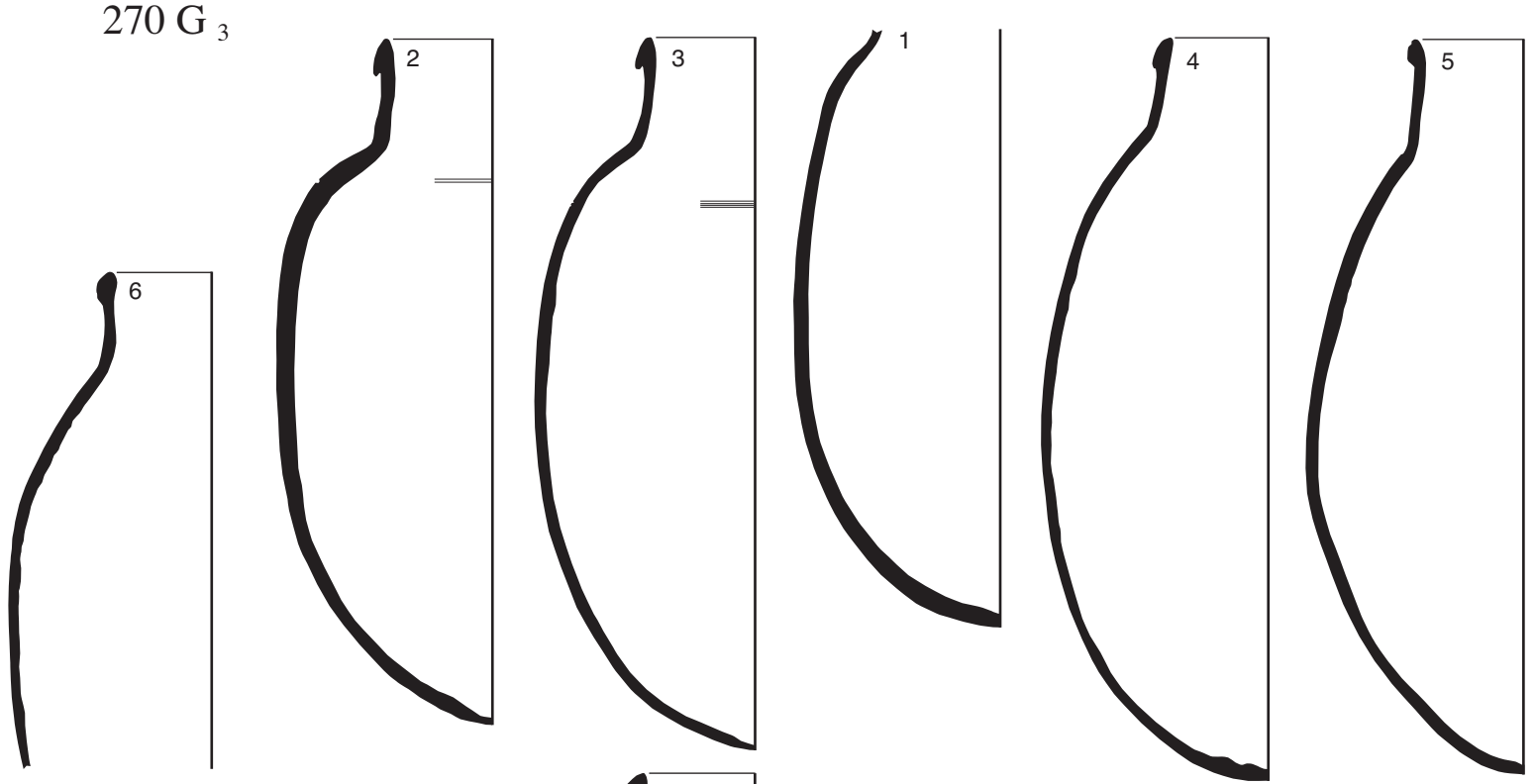
270 G 3




9

10

—1500

—1600

—1700

NORTHERN ALLUVIAL PLAIN

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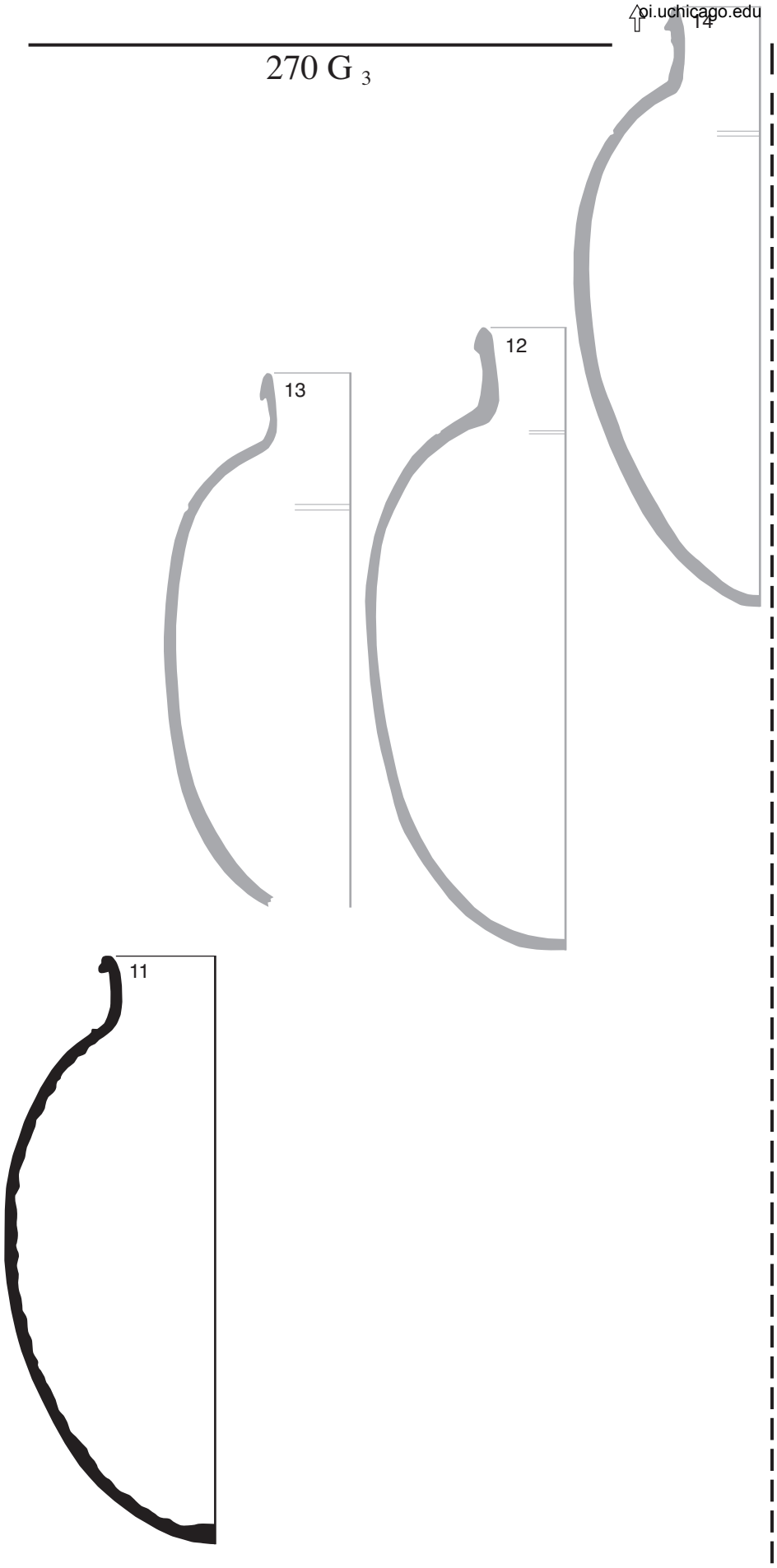
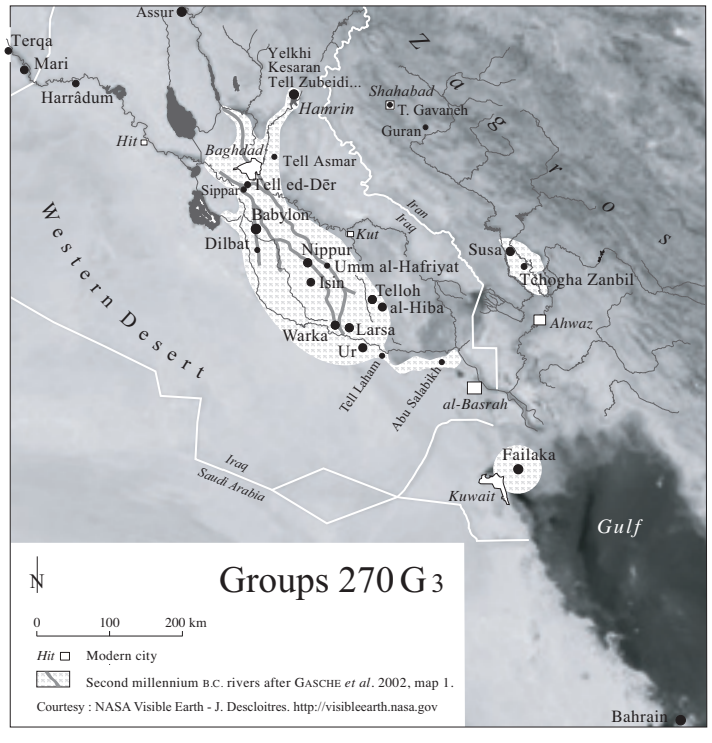



# PLATE 130

## 270 G 3

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | D | 103924 | E | IIIb | 2.5Y 7/2 | ø rim : -. Burial D.249 probably dug from IIIb. *MHEM* 1, Pls. 23 and 39 : 8. |
| 2 | D | 105777 | E | IIId | 5Y 7/2 | ø rim : 160. *MHEM* 1, Pl. 39 : 3. |
| 3* | D | 105806 | E | IIId | 10YR 7/3 | ø rim : 158. Burial D.325 dug from IIId. *MHEM* 1, Pls. 23 and 39 : 2. |
| 4 | D | 107945 | F | 0 | 10YR 7/3 | ø rim : 155. Burial D.394 dug from Ensemble 0. |
| 5 | D | 105839 | E | IIId | 7.5YR 7/4 | ø rim : 152. *MHEM* 1, Pl. 39 : 4. |
| 6* | D | 105838 | E | IIId-f | 2.5Y 7/2 | ø rim : 156. *MHEM* 1, Pl. 39 : 5. |
| 7 | D | 101282 | A | 0 | 5Y 7/3 | ø rim : 180. |
| 8* | D | 101397 | A | Ia | 10YR 7/4 | ø rim : 148. |
| 9* | D | 101271 | A | Ic | 5YR 5/4 | ø rim : 184. |
| 10 | D | 101994 | A | Ie | 10YR 6/4 | ø rim : 176. *TD* 2, Pl. 24 : 4. SALLABERGER 1996, Pl. 3 : 3. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 11 | N | 2P 299 | TB | I 1 | bronwnish-buff | ø rim : 185. *OIP* 78, Pl. 92 : 15. |
| DIYALA | | | | | | |
| 12 | Yel | y 254 | B | IIIa | *giallo-verdastro* | ø rim : 144. GABUTTI 2002-03, Pl. 103 : 3. |
| 13 | Yel | y 311 | A | IIIa | *rossastro* | ø rim : 148. GABUTTI 2002-03, Pl. 103 : 4. |
| SUSIANA | | | | | | |
| 14 | S | GS-5953 | A | XIII | *jaunâtre* | ø rim : -. *MDP* 47, Pl. 37 : 2. |




20 cm

(Photos at various scales)

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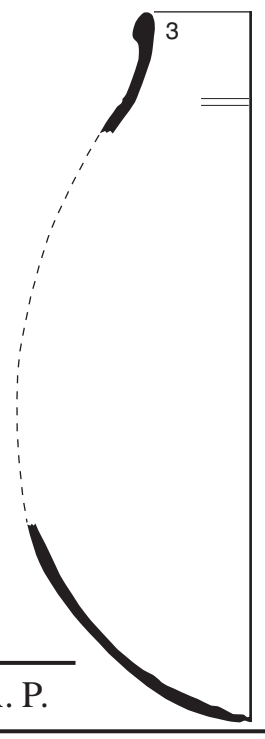
270 H 3

270 I 3

—1400

—1500

—1600



SUSIANA

N. A. P.

SUSIANA

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# PLATE 131

## 270 H $_3$

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SUSIANA | | | | | | |
| 1 | S | GS-6837 | A | XI *ancien* | *jaunâtre* | ø rim : 129. *MDP* 47, Pl. 34 : 3. |
| 2 | S | GS-6813 | A | XIII | *jaunâtre* S : *verdâtre* | ø rim : 185. *MDP* 47, Pl. 35 : 4. |

## 270 I $_3$

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 3* | D | 109588 | F | Ib | 7.5YR 8/2 | ø rim : 155. |
| SUSIANA | | | | | | |
| 4 | S | GS-6841 | A | XII *ancien* | *jaunâtre* | ø rim : 210. *MDP* 47, Pl. 35 : 3. |

270 H $_3$ and 270 I $_3$ continued on Pl. 132

20 cm

(Photos at various scales)

➤ ➤

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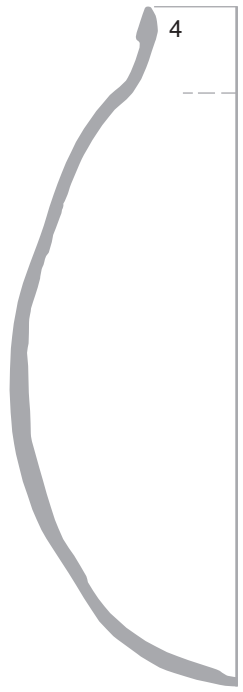
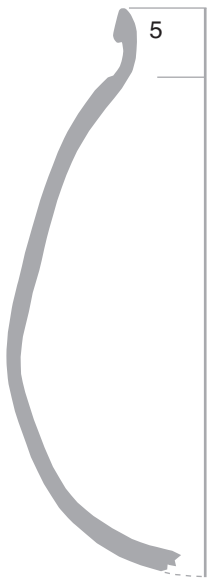
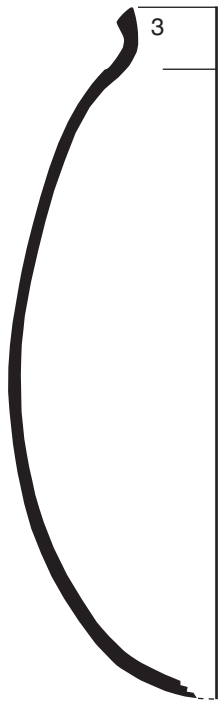
—1150

270 H 3

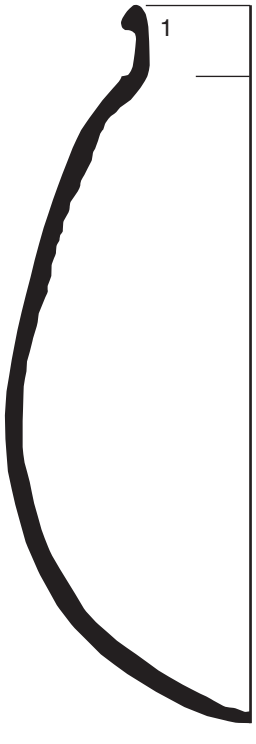


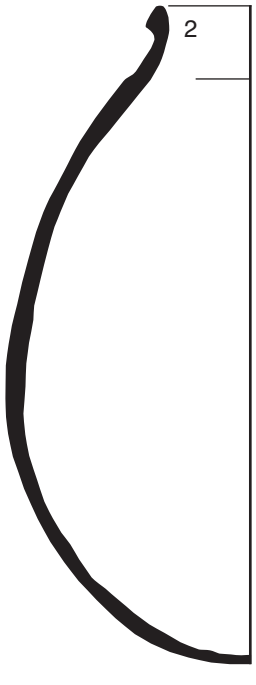




—1200




—1300




—1350

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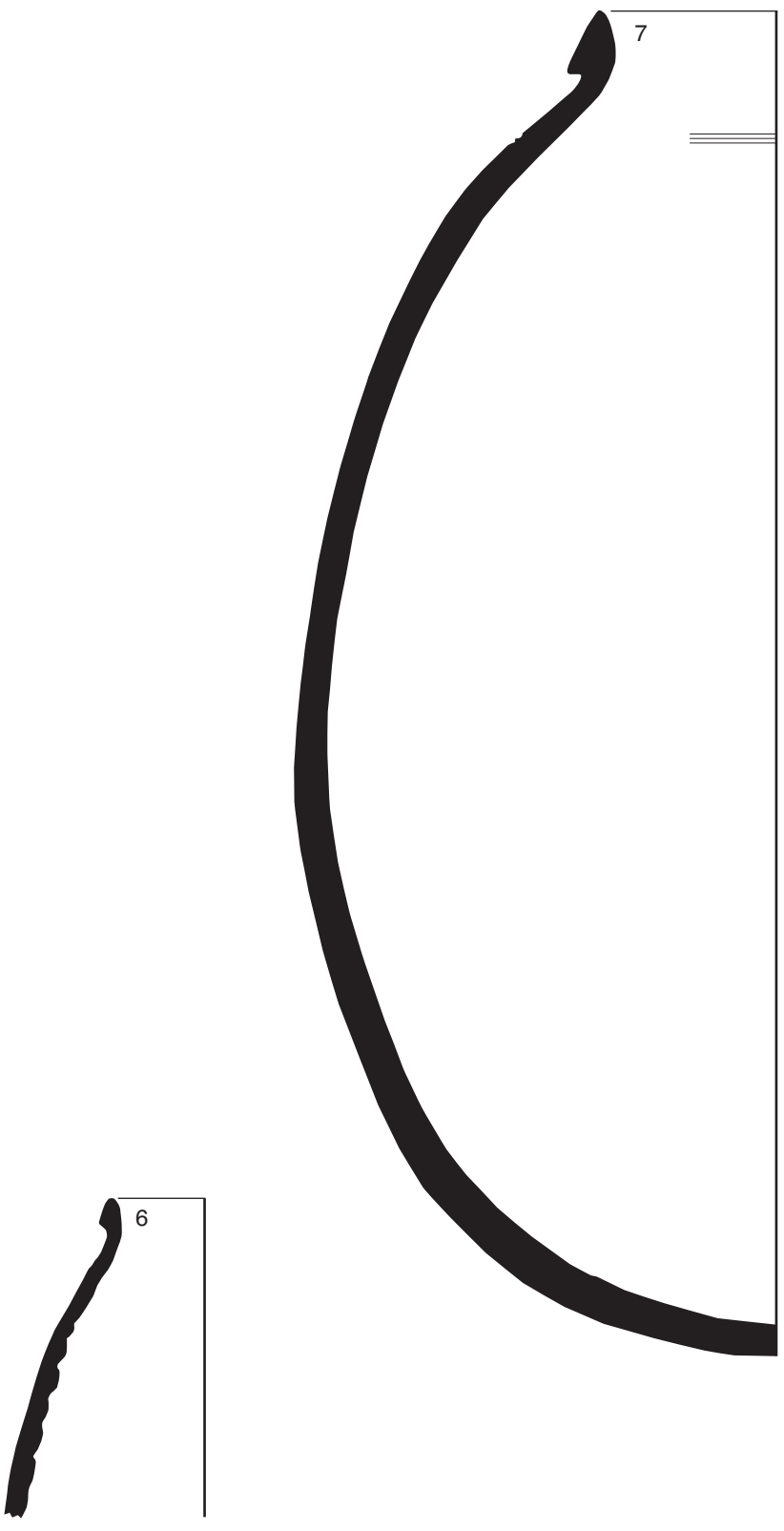
# PLATE 132

## 270 I 3




N. A. P. S. A. P.

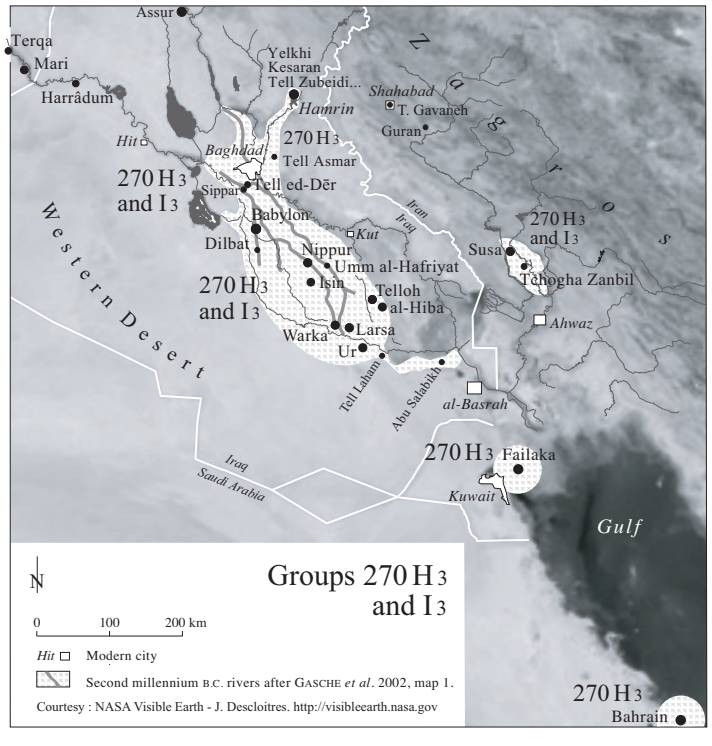
## 270 H 3

270 H 3 and 270 I 3 continued from Pl. 131

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 105690 | E 3 | Ia 1 | 10YR 6/4 | ø rim : 168. Burial 384 dug from Ia 1. *NAPR* 6, Pl. 18 : 2. |
| 2* | D | 105689 | E 3 | Ia 1 | 10YR 7/4 | ø rim : 135. Burial 384 dug from Ia 1. *NAPR* 6, Pl. 18 : 1. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 3 | N | 3P 100 | TA | VII | beige | ø rim : 130. *OIP* 78, Pl. 99 : 4. |
| DIYALA | | | | | | |
| 4 | Iml | 78/13 | - | - | - | ø rim : 120. Burial 4. *BaF* 7, 5-8, 12, Pl. 42 : 158. |
| 5 | Iml | 78/3 | - | - | - | ø rim : 108. *BaF* 7, 12, Pl. 44 : 181. |

## 270 I 3

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 6* | D | 109560 | E 3 | Ia 1 | 10YR 8/3 | ø rim : 146. *NAPR* 6, Pl. 18 : 3. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 7 | N | 3P 155 | TA | Prob. VII | buff | ø rim : 290. Burial 3B 33 probably dug from VII. *OIP* 78, Pl. 99 : 3. |




20 cm

(Photos at various scales)

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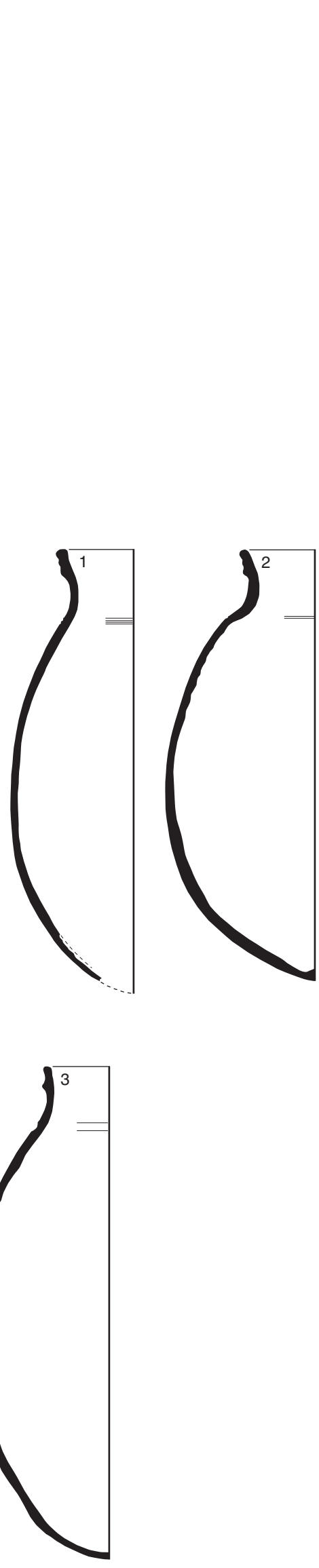
270 J 3

270 K 3

—1200

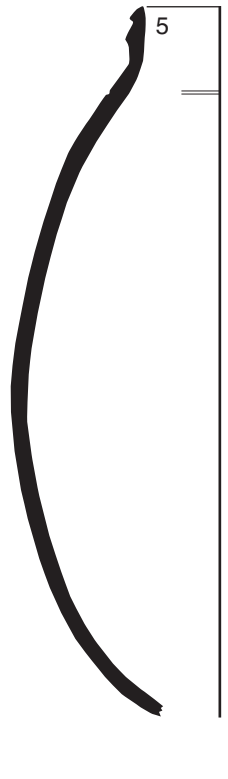
—1300

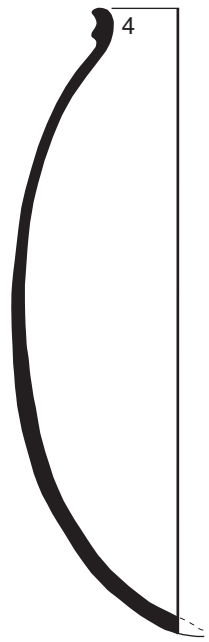
—1400

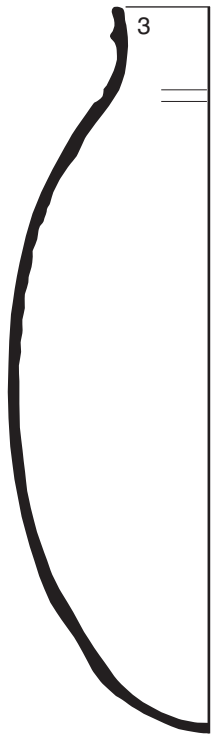


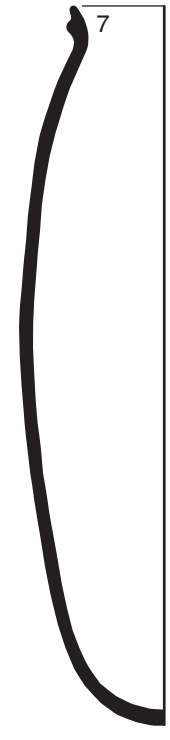









—1100

—1200

—1300

NORTHERN ALLUVIAL PLAIN S. A. P.

N. A. P. S. A. P.

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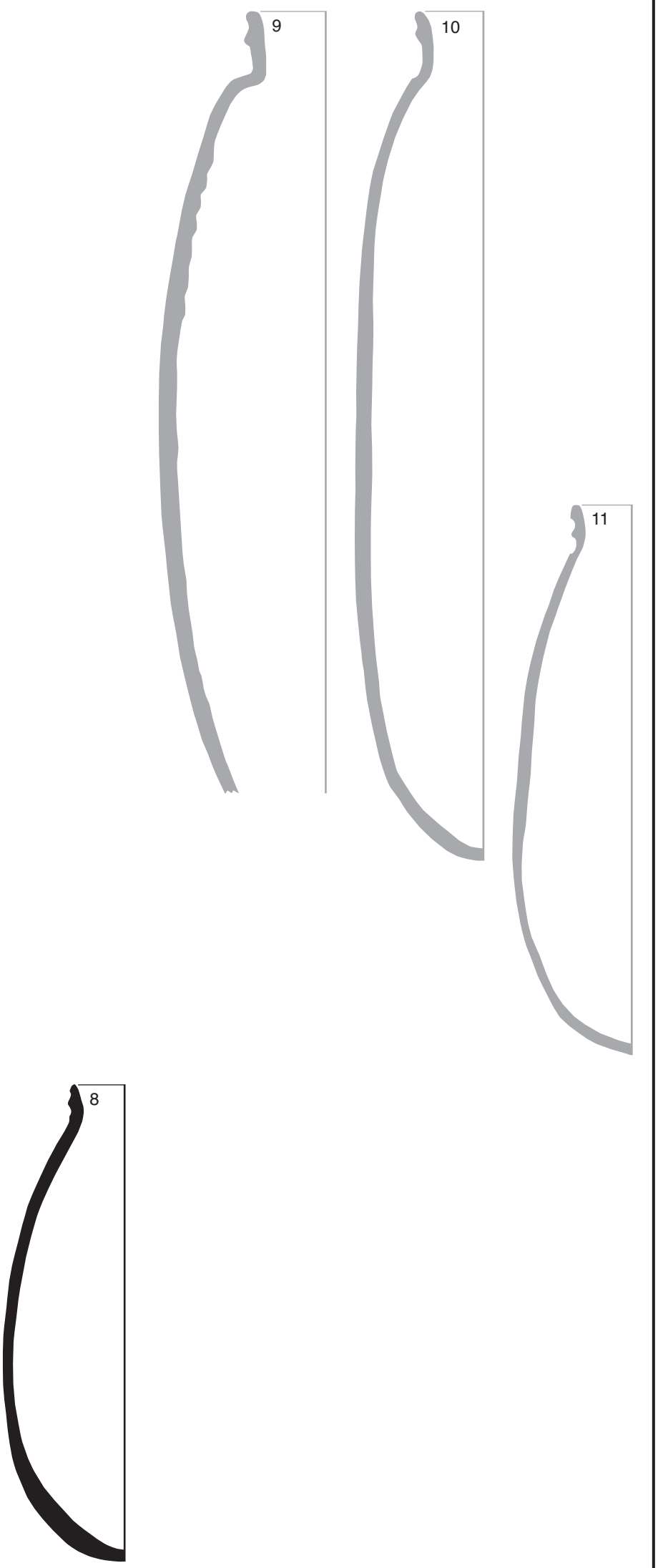
# PLATE 133

## 270 K 3



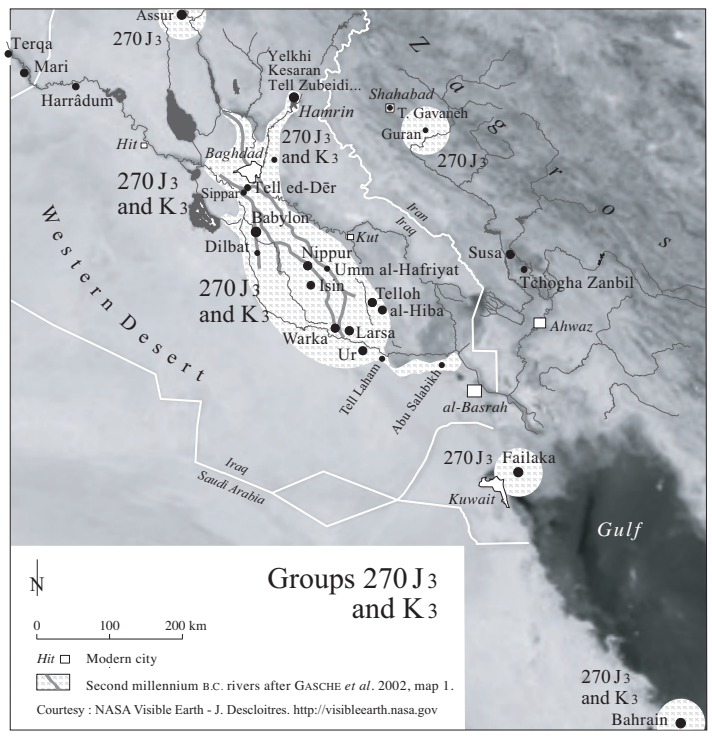

## 270 J 3

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1* | D | 107330 | E 3 | Ia 1 | 5Y 7/2 | ø rim : 148. Burial D.360 dug from Ia, probably Sub-Phase 1. *NAPR* 6, Pl. 18 : 9. |
| 2* | D | 107333 | E 3 | Ia 1 | 5YR 6/4 | ø rim : 147. Burial D.361 dug from Ia, probably Sub-Phase 1. *NAPR* 6, Pl. 18 : 10. |
| 3 | D | 105654 | E 3 | Ic 1 | 2.5Y 7/4 | ø rim : 124. Burial D.374A dug from Ic, probably Sub-Phase 1. *NAPR* 6, Pl. 18 : 7. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 4 | N | 17 N 56 | WC-3 | III | buff | ø rim : 113. |
| 5 | N | 3P 115 | TA | VII | tan<br>S : buff | ø rim : 122. *OIP* 78, Pl. 99 : 7. |

## 270 K 3

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 6 | Dey | A 80.3 | B | I | 5Y 7/3 | ø rim : 108. Pit 2014 dug from I. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 7 | N | D 309 | WC-1 | III-II [1)] | - | ø rim : 115. *OIP* 111, Pl. 83 : e. |
| 8 | N | 14 N 151 | WC-1 | III | - | ø rim : 105. Burial 68. *OIP* 111, Pls. 68 : l and 83 : f. |
| DIYALA | | | | | | |
| 9 | Zub | - | - | Post I | - | ø rim : 148. Burial 52. *BaF* 7, 44, Pl. 123 : 258. |
| 10 | Zub | - | - | Post I | - | ø rim : 126. *BaF* 7, Pl. 123 : 259. |
| 11 | Zub | - | - | I (*früh*) | - | ø rim : 114. Burial 61. *BaF* 7, 45, 47, Pl. 125 : 283. |

[1)] Pit between III and II.




20 cm

(Photos at various scales)

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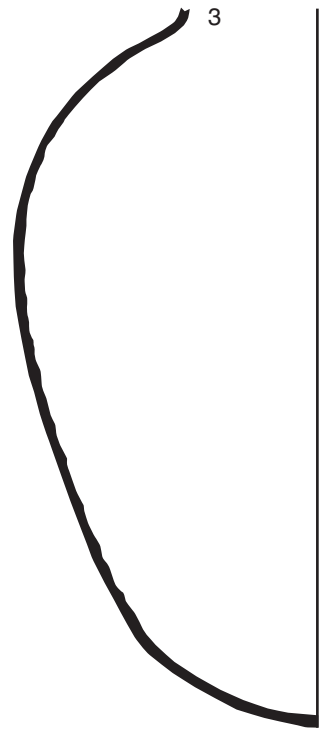
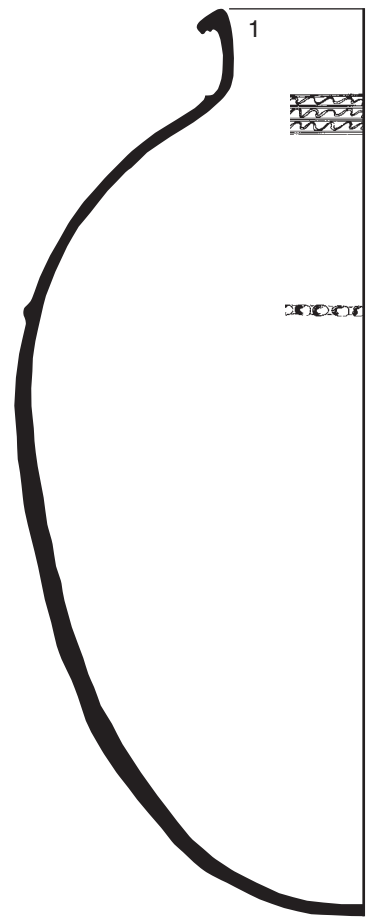
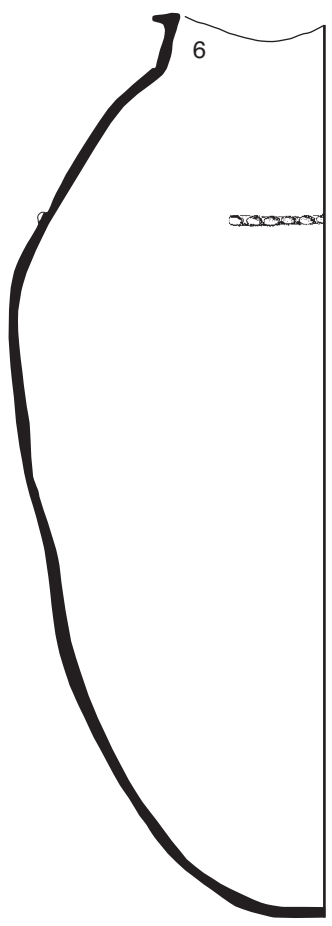
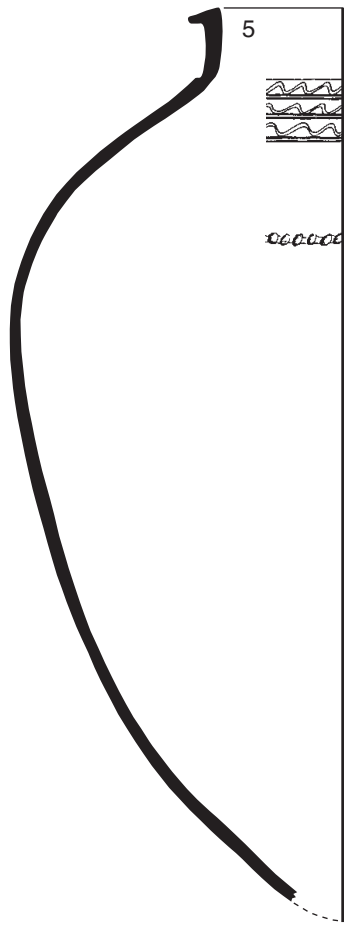
—1700

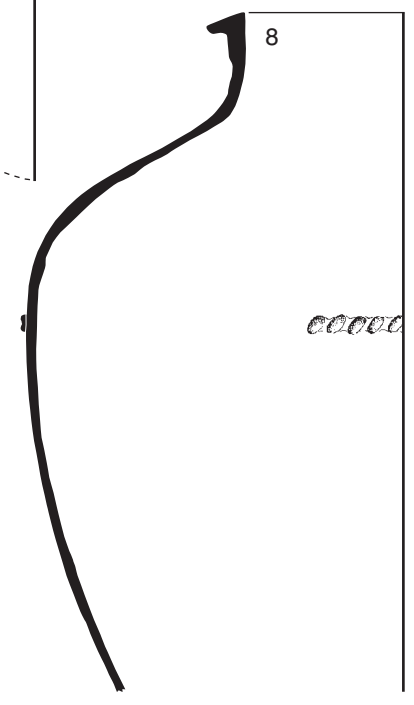
275 A 3

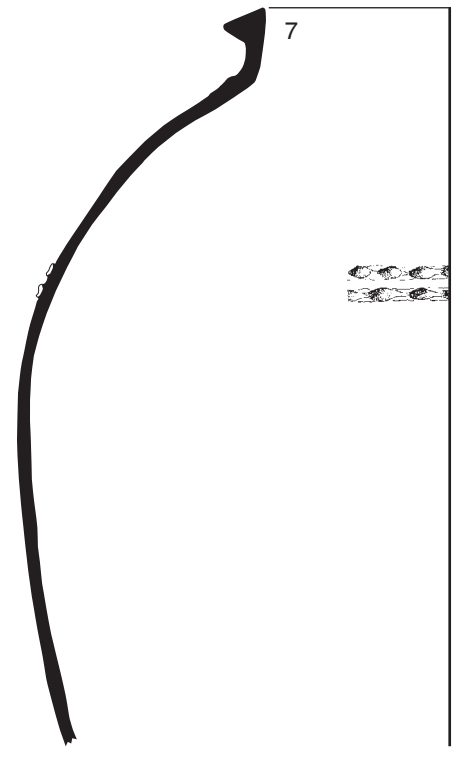



—1800

NORTHERN ALLUVIAL PLAIN

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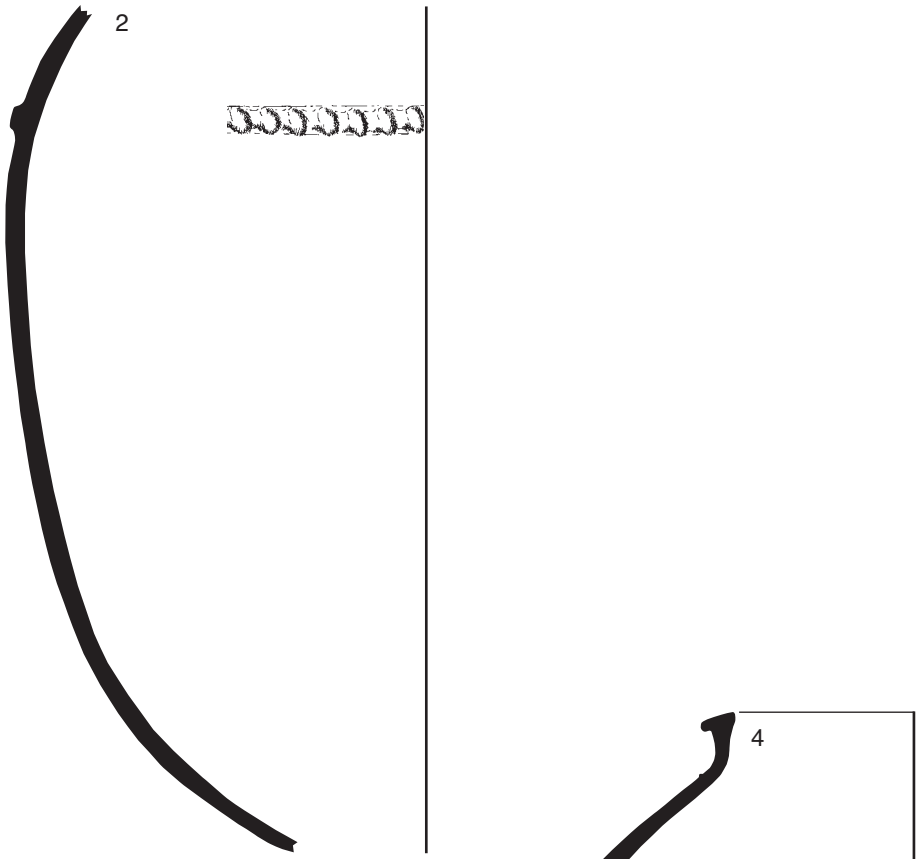
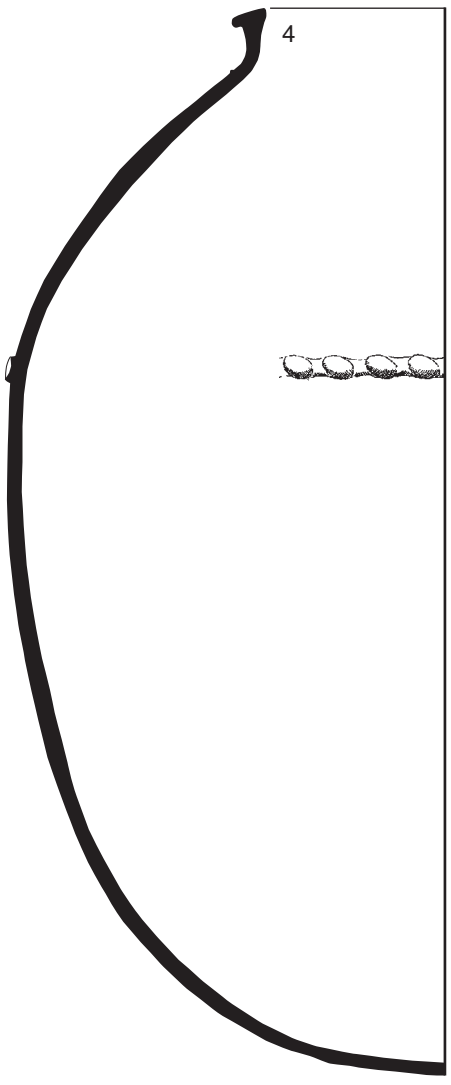
# PLATE 134

## 275 A 3




| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | D | 101666 | A | Ig | 5Y 7/3 | ø rim : 220. Burial D.43 dug from Ig. |
| 2* | D | 101982 | A | Ig | 5Y 7/2 | ø rim : -. Burial D.57 dug from Ig. |
| 3* | D | 101533 | A | Ig | 5YR 6/4 | ø rim : -. |
| 4 | D | 102356 | A | Ii | 2.5YR 6/4 | ø rim : 284. |
| 5 | D | 103746 | A | Ii | 10YR 8/3 | ø rim : 206. |
| 6* | D | 102981 | A | Ii | 10YR 5/1 S. : 5Y 5/3 | ø rim : ± 230. Rim, neck and body very warped. |
| 7* | D | 103745 | A | IIa | 5Y 7/2 | ø rim : 300. *TD* 4, Pl. 17 : 1. |
| 8* | D | 103726 | A | IIa | 5YR 6/6 | ø rim : 260. *TD* 4, Pl. 17 : 2. |

Continued on Pl. 135

20 cm

(Photos at various scales)

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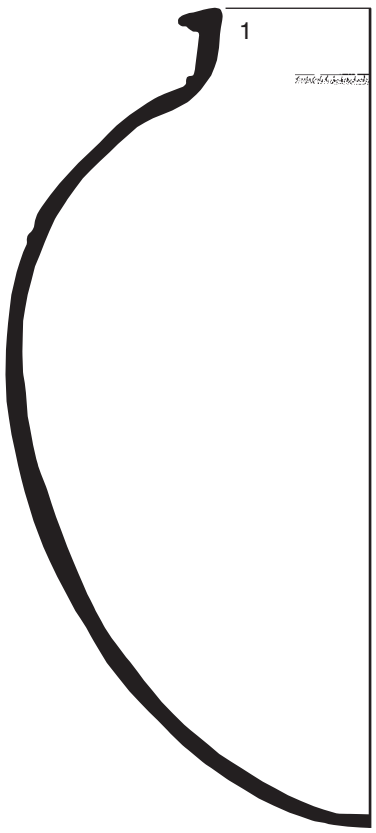
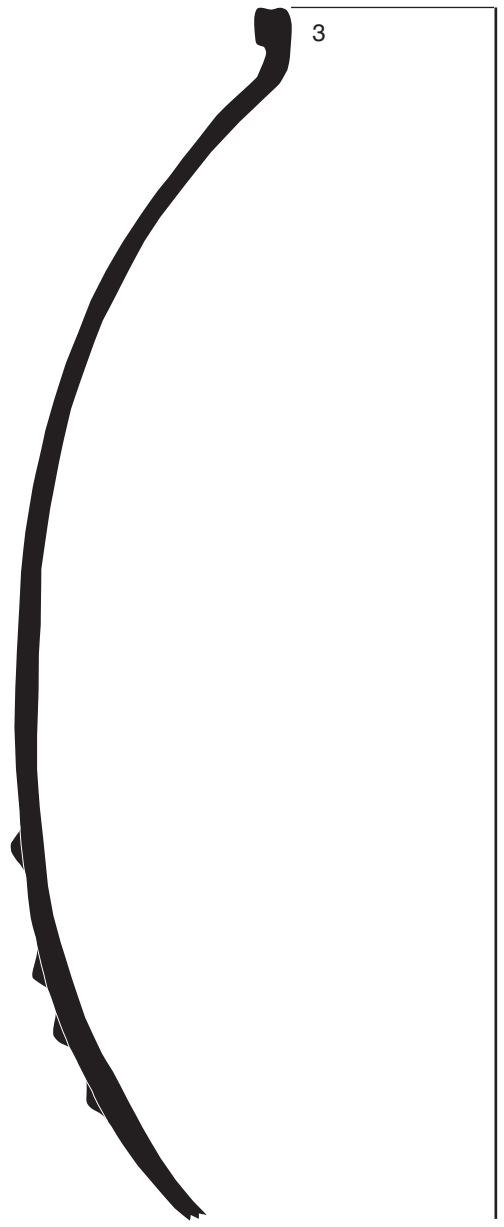
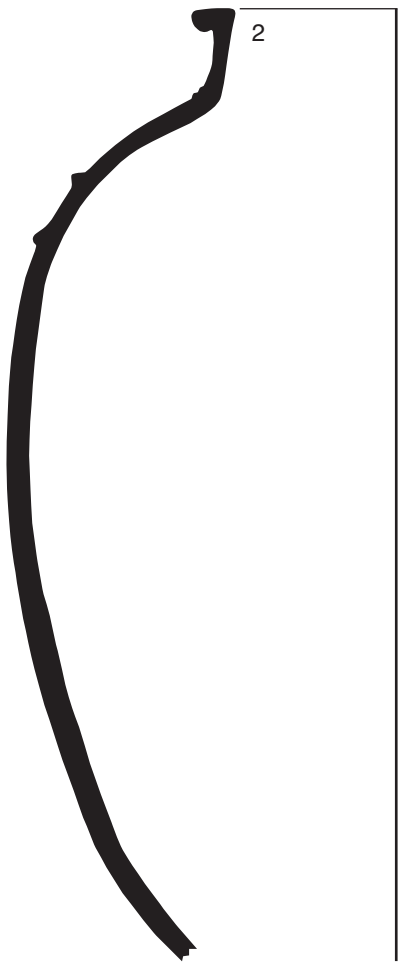
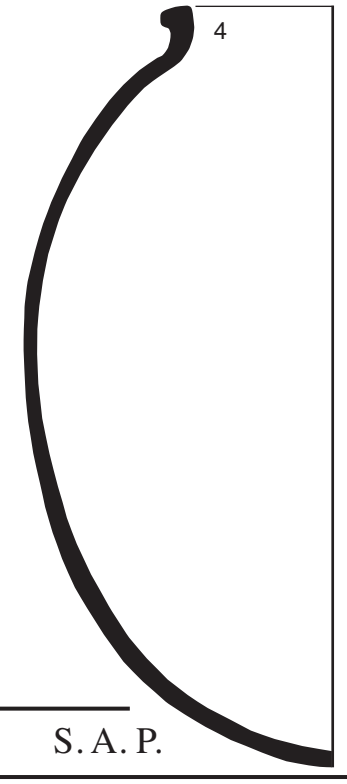
275 A 3




275 B 3




—1500
—1600
—1700
—1200
—1300
—1600

N. A. P.
N. A. P.
S. A. P.

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# PLATE 135

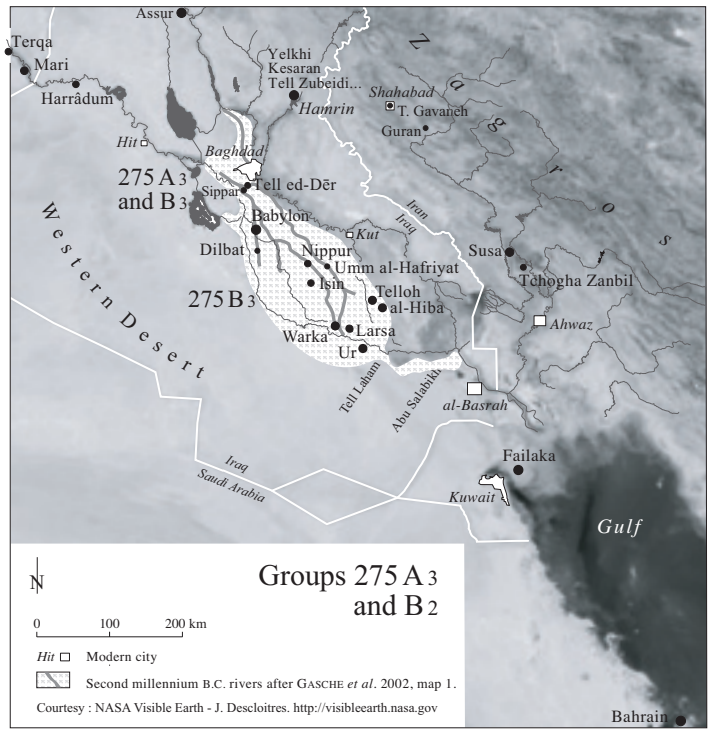
## 275 A 3

Continued from Pl. 134

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | D | 103842 | E | IIIb | 2.5YR 8/2 | ø rim : 248. Burial D.251 dug from IIIb. *MHEM* 1, Pls. 24 and 39 : 15. |
| 2 | D | 102541 | A | Ie | 10YR 6/4 | ø rim : 270. Burial D.163 dug from Ie. |

## 275 B 3

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 3* | D | 107378 | E3 | 0 | 5YR 6/4 | ø rim : 320. Pit 14 dug from Ensemble 0. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 4 | N | 3P 458 | TA | X | buff<br>S : pink buff | ø rim : 230. *OIP* 78, Pl. 97 : 1. |




20 cm

(Photos at various scales)

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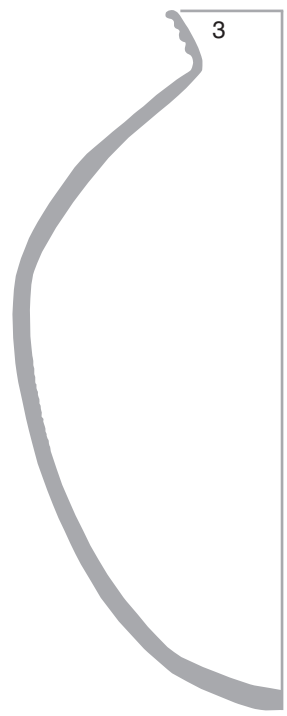
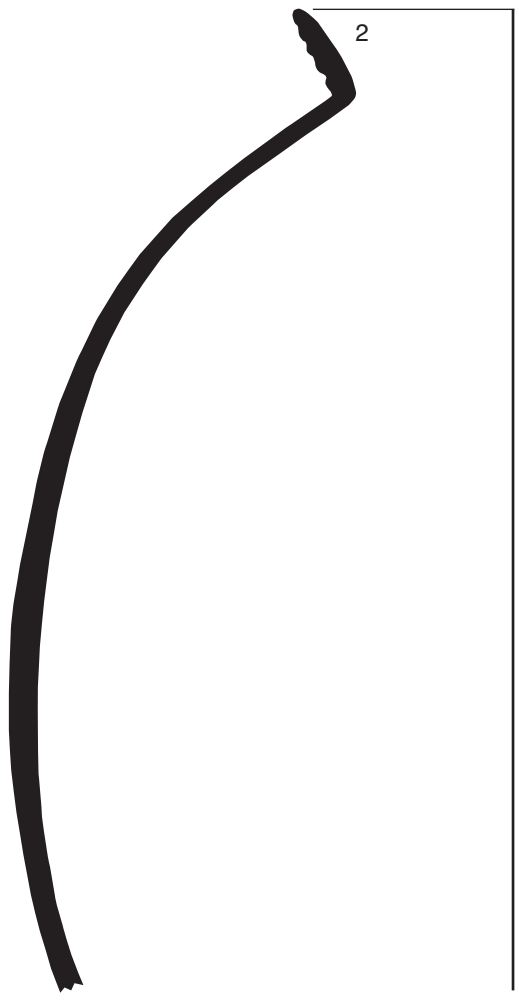
280 A 3

1



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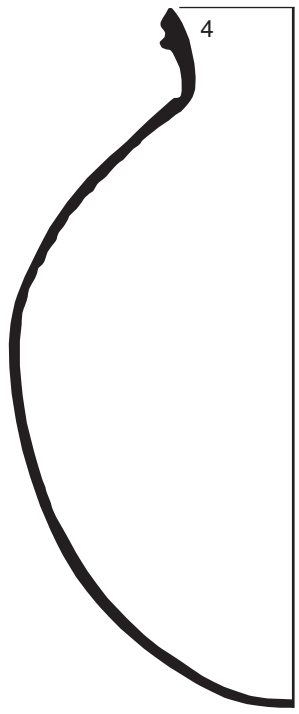
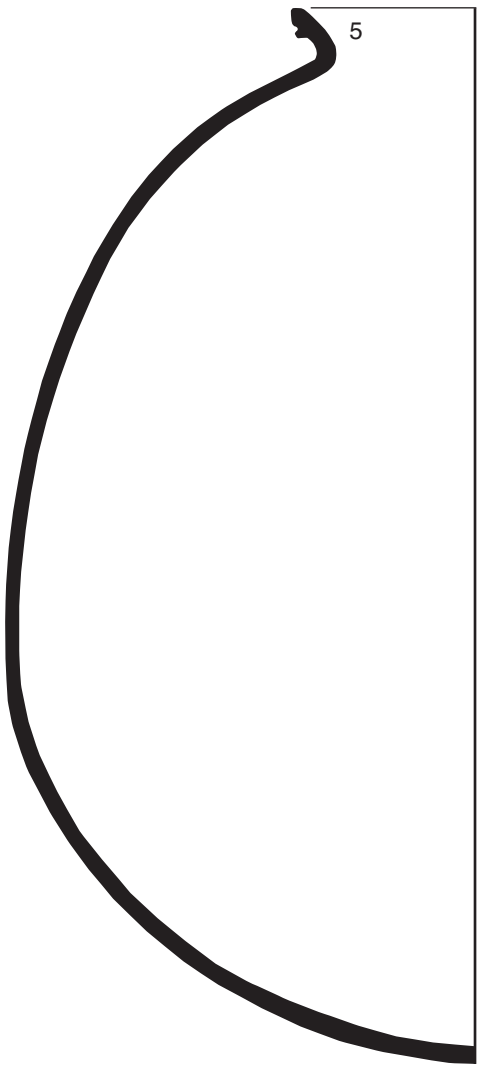
# PLATE 136

## 280 B 3



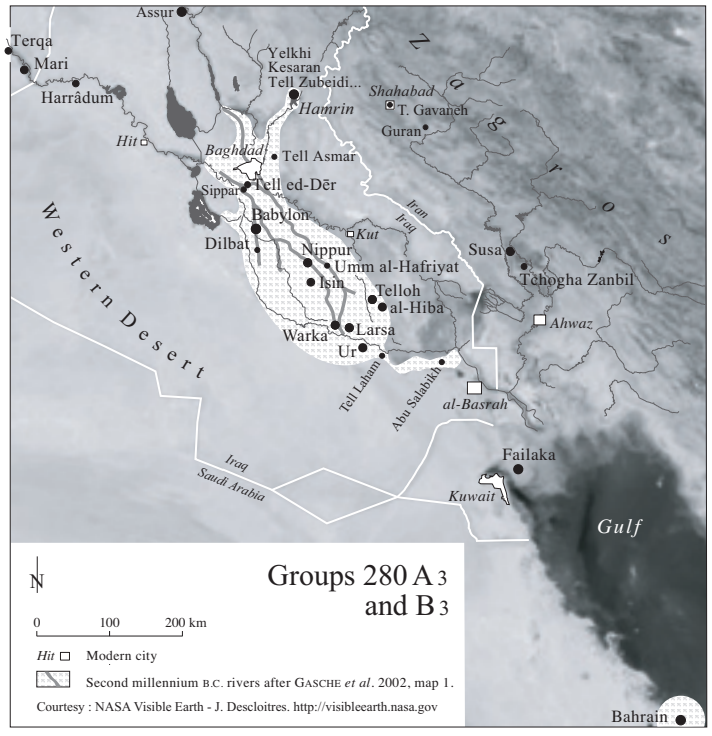




## 280 A 3

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| NORTHERN ALLUVIAL PLAIN | | | | | | |
| 1 | D | 100282 | A | Ia | 5YR 7/4 | ø rim : 335. *TD* 1, Pl. 24 : 1. |
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 2 | N | 3P 193 | TB | V 1 | tan | ø rim : 288. *OIP* 78, Pls. 87 : 14 and 148 : 2 (cuneiform inscription : 175 5/6 *sila*). |
| DIYALA | | | | | | |
| 3 | Yel | y 276 | A | Vb | *cuoio* | ø rim : 154. GABUTTI 2002-03, Pl. 95 : 4. |

## 280 B 3

| | Site | ID No. | Exc. Area | Stratigr. Inform. | Color | Remarks |
|---|---|---|---|---|---|---|
| SOUTHERN ALLUVIAL PLAIN | | | | | | |
| 4 | N | A 2020 | WB | IV 6 | pinkish-buff | ø rim : 176. |
| 5 | N | - | TB | V 2 | tan | ø rim : 242. *OIP* 78, Pls. 87 : 13. |




20 cm

(Photos at various scales)

SOUTHERN ALLUVIAL PLAIN

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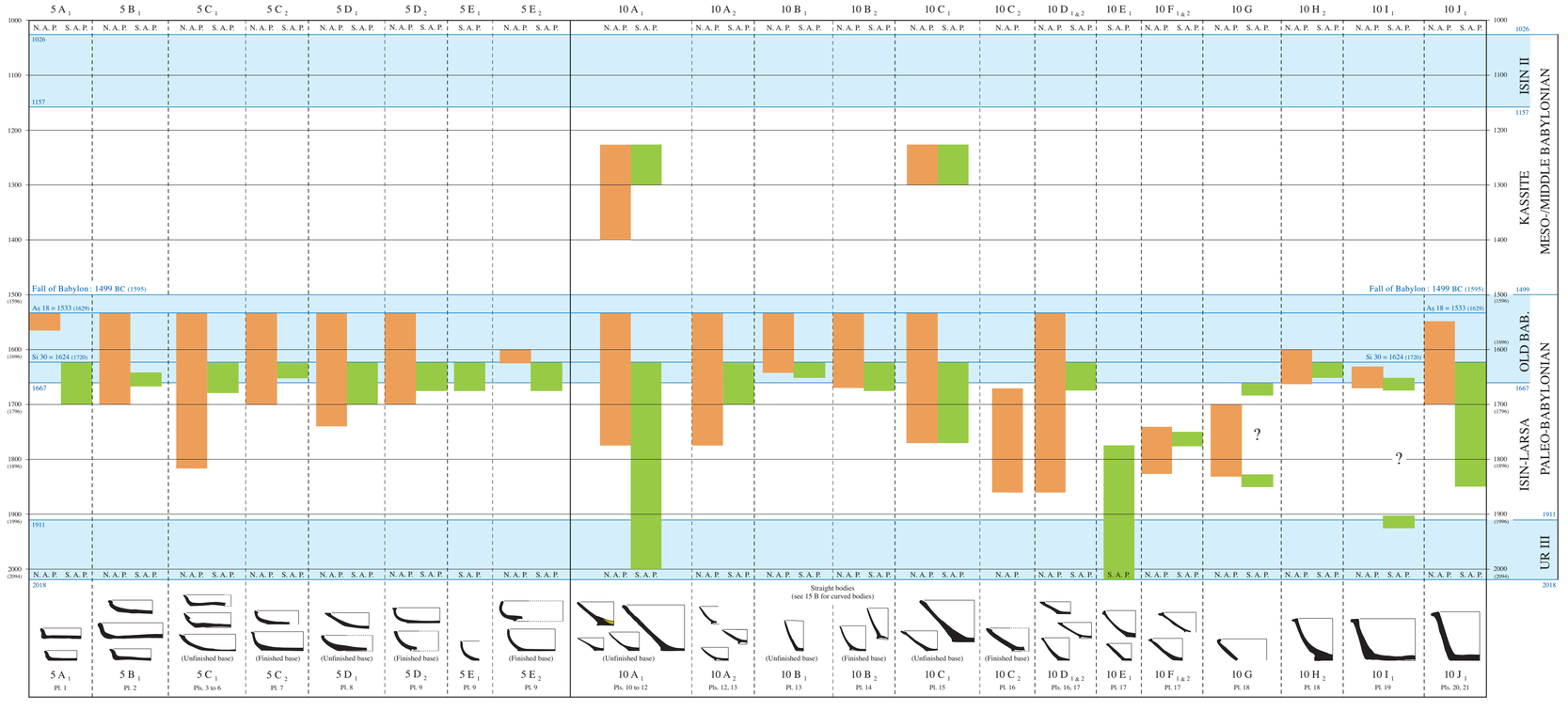


Table 1. Synoptic Table, Families 5 and 10

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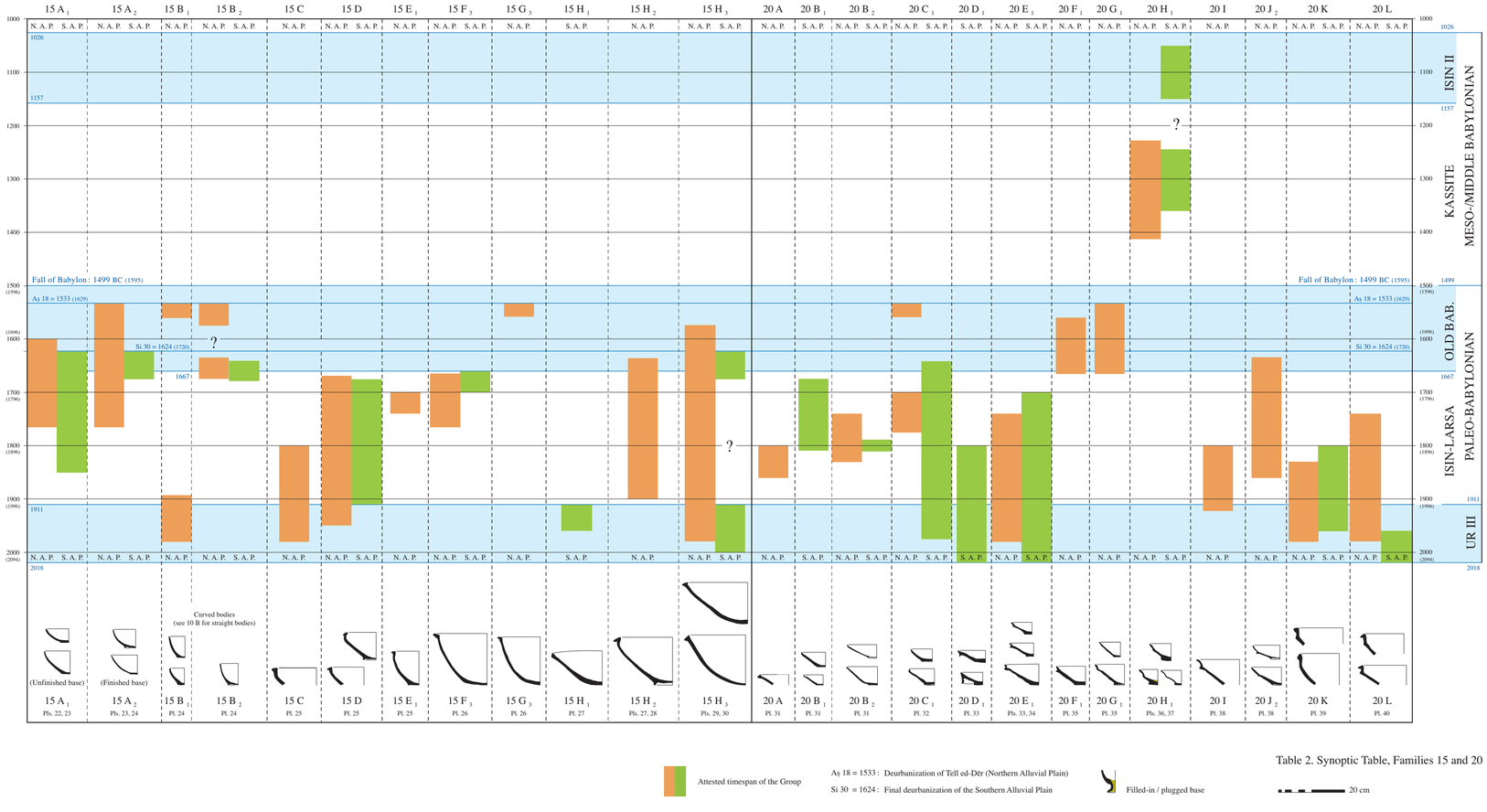


Attested timespan of the Group

Aṣ 18 = 1533 : Deurbanization of Tell ed-Dēr (Northern Alluvial Plain)

Si 30 = 1624 : Final deurbanization of the Southern Alluvial Plain

Filled-in / plugged base

20 cm

Table 2. Synoptic Table, Families 15 and 20

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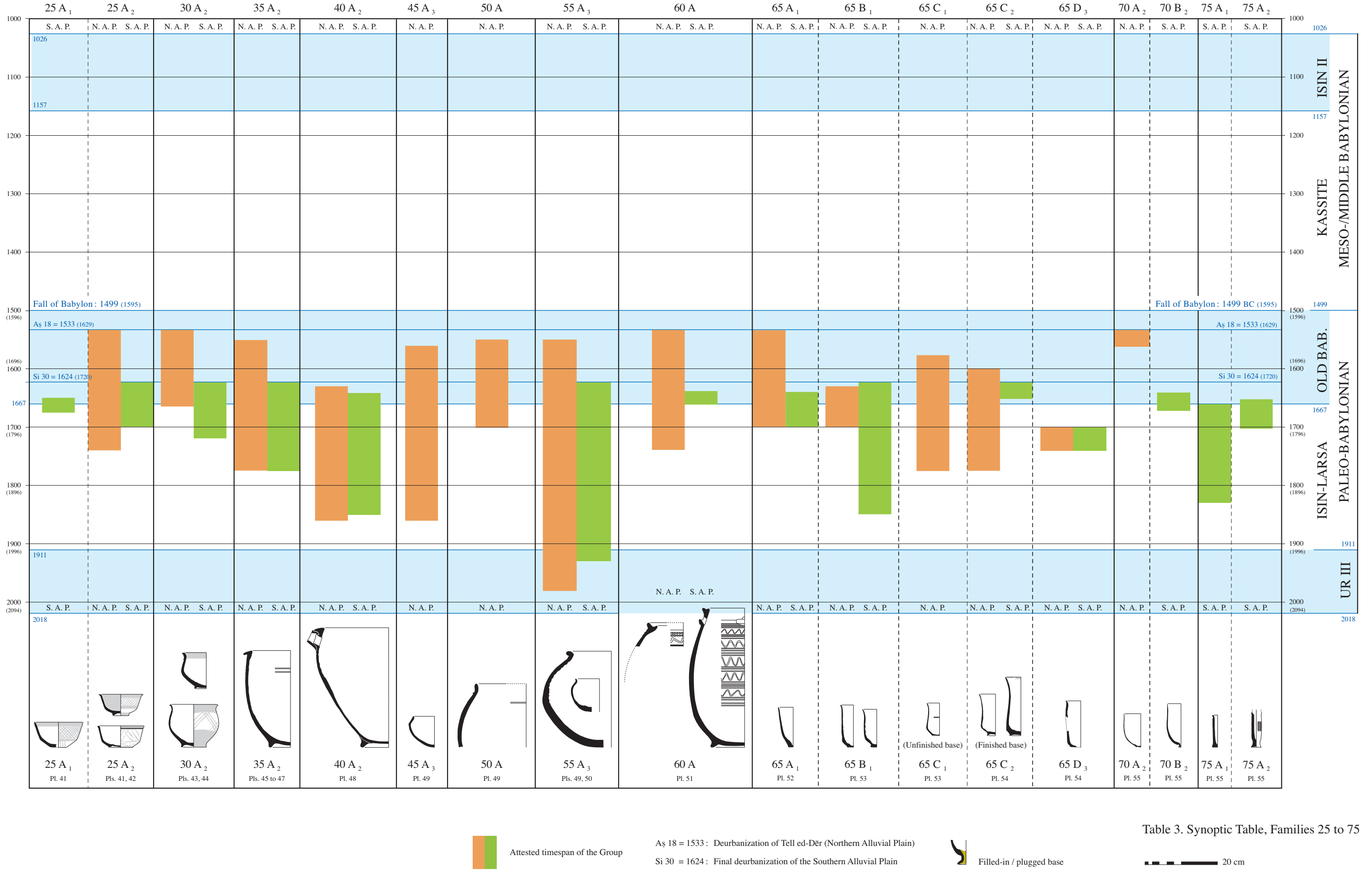


Table 3. Synoptic Table, Families 25 to 75

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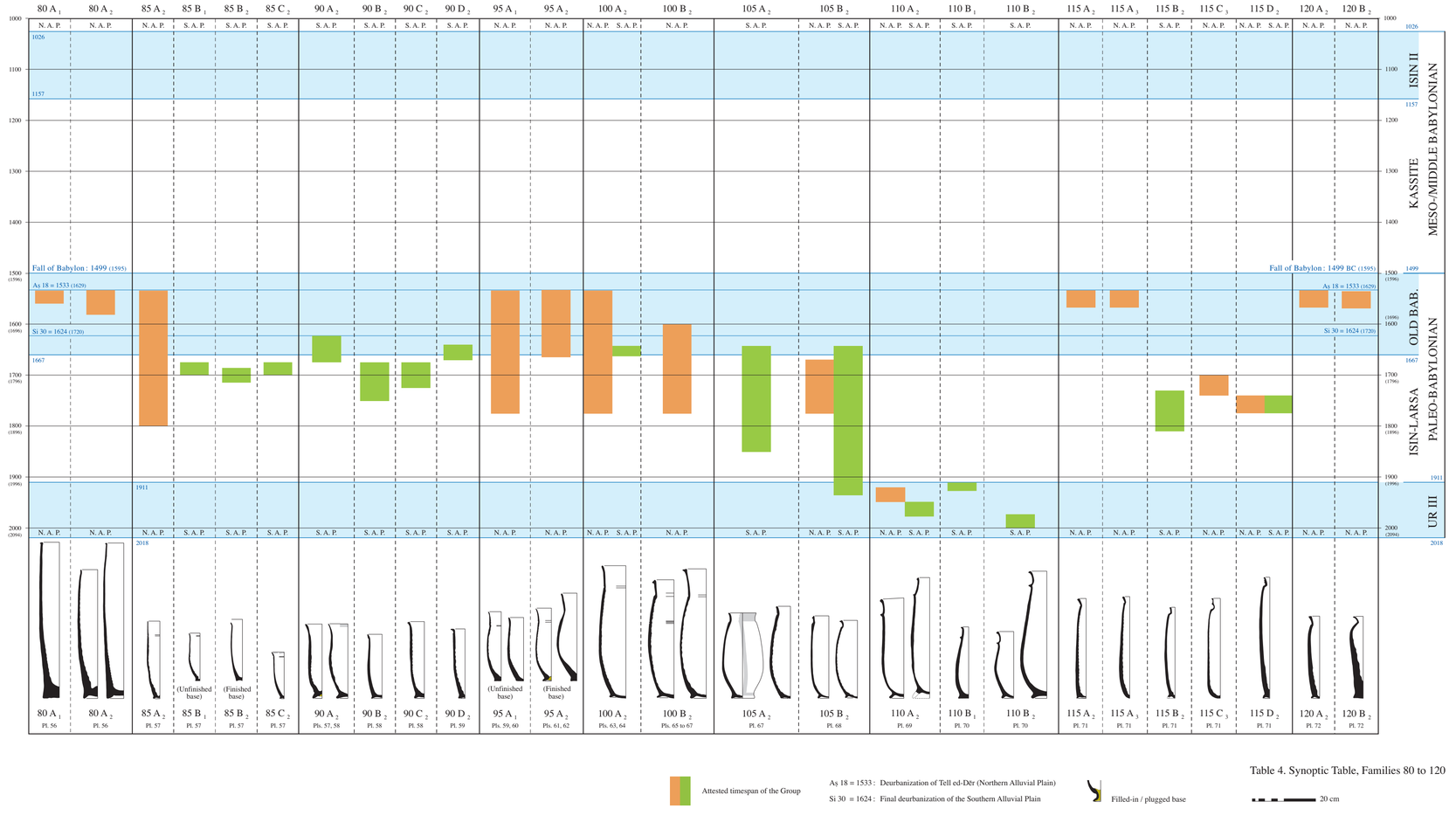


Table 4. Synoptic Table, Families 80 to 120

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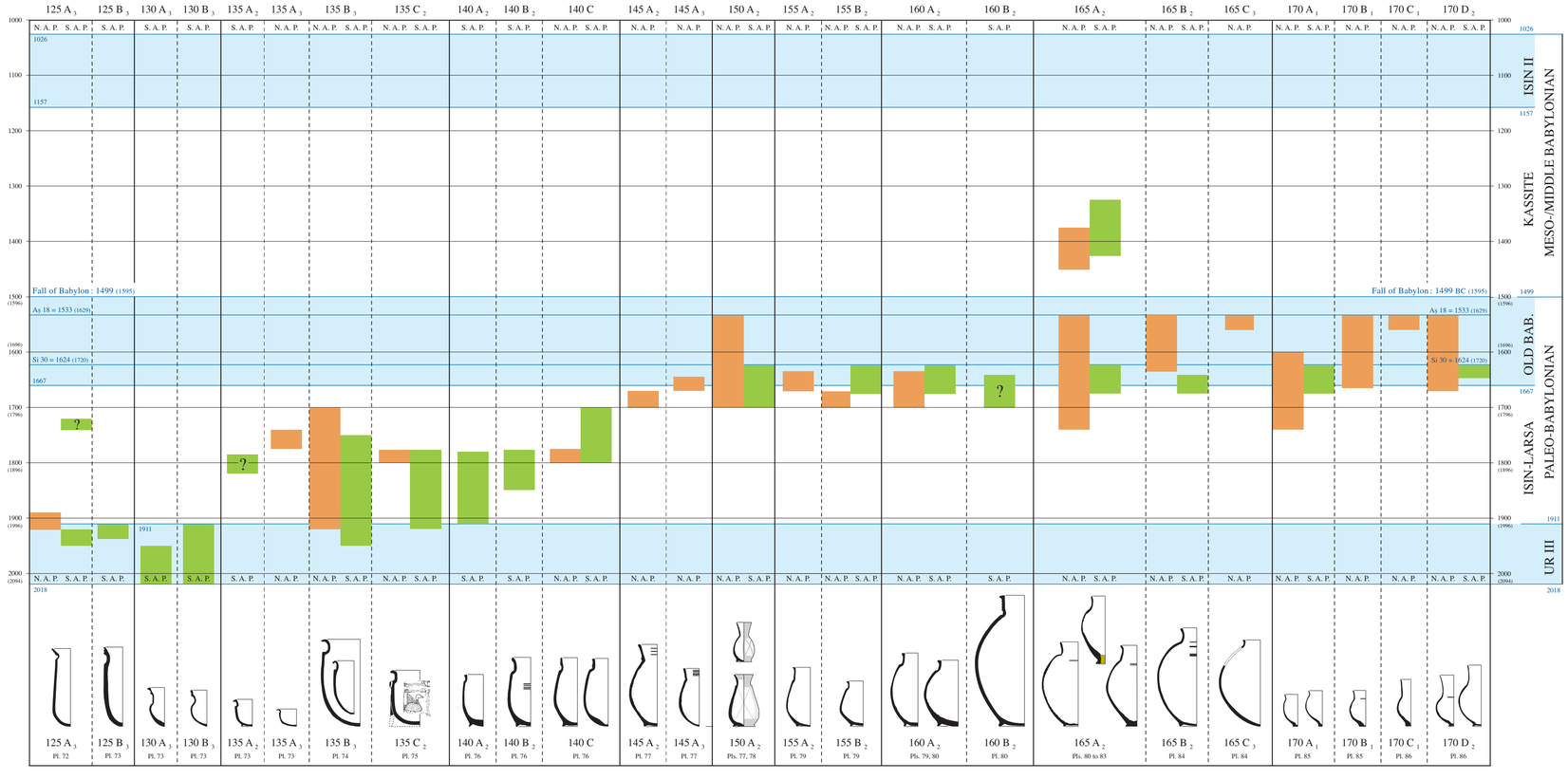


Table 5. Synoptic Table, Families 125 to 170

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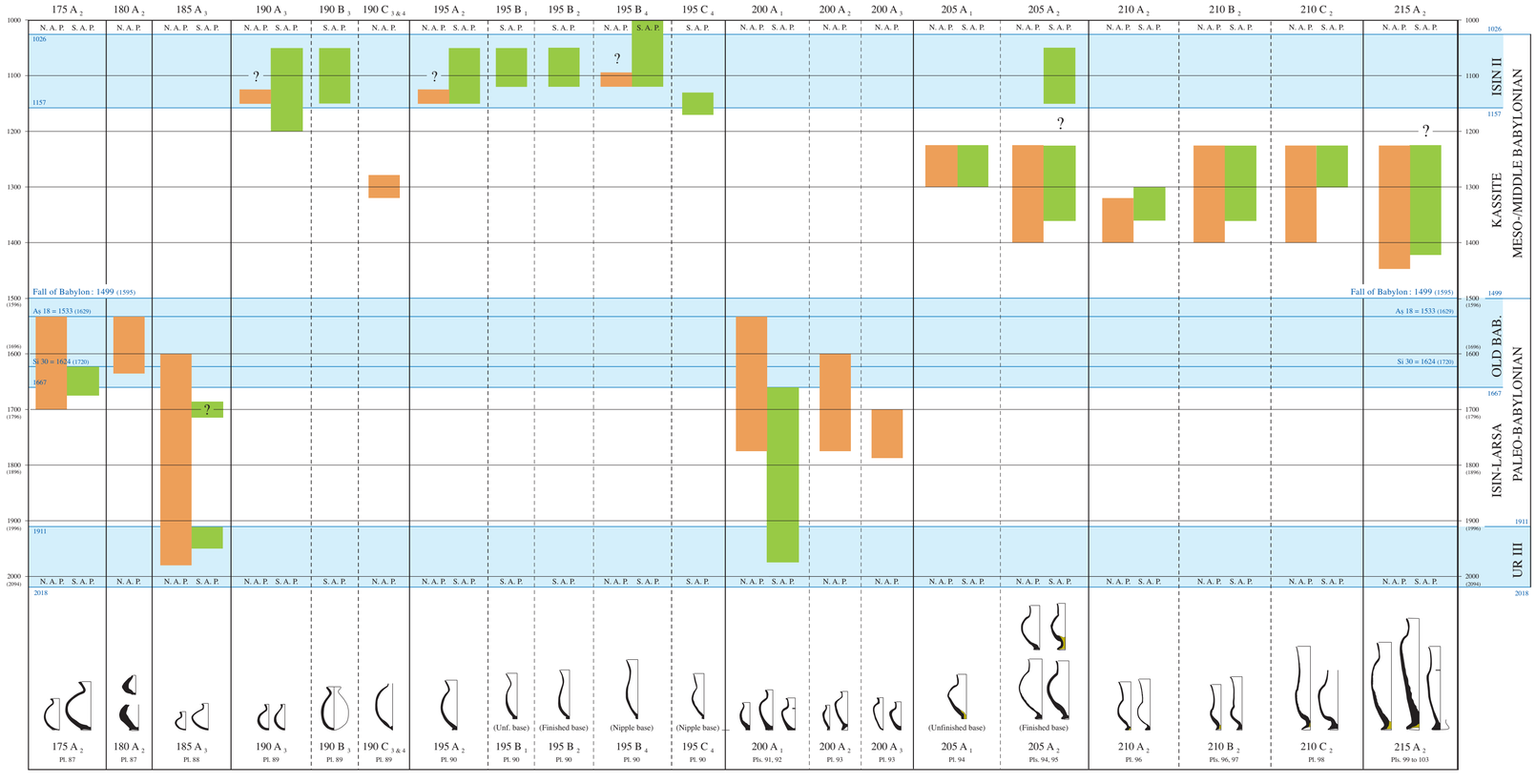


Attested timespan of the Group

As 18 = 1533 : Deurbanization of Tell ed-Dēr (Northern Alluvial Plain)

Si 30 = 1624 : Final deurbanization of the Southern Alluvial Plain

Filled-in / plugged base

20 cm

Table 6. Synoptic Table, Families 175 to 215

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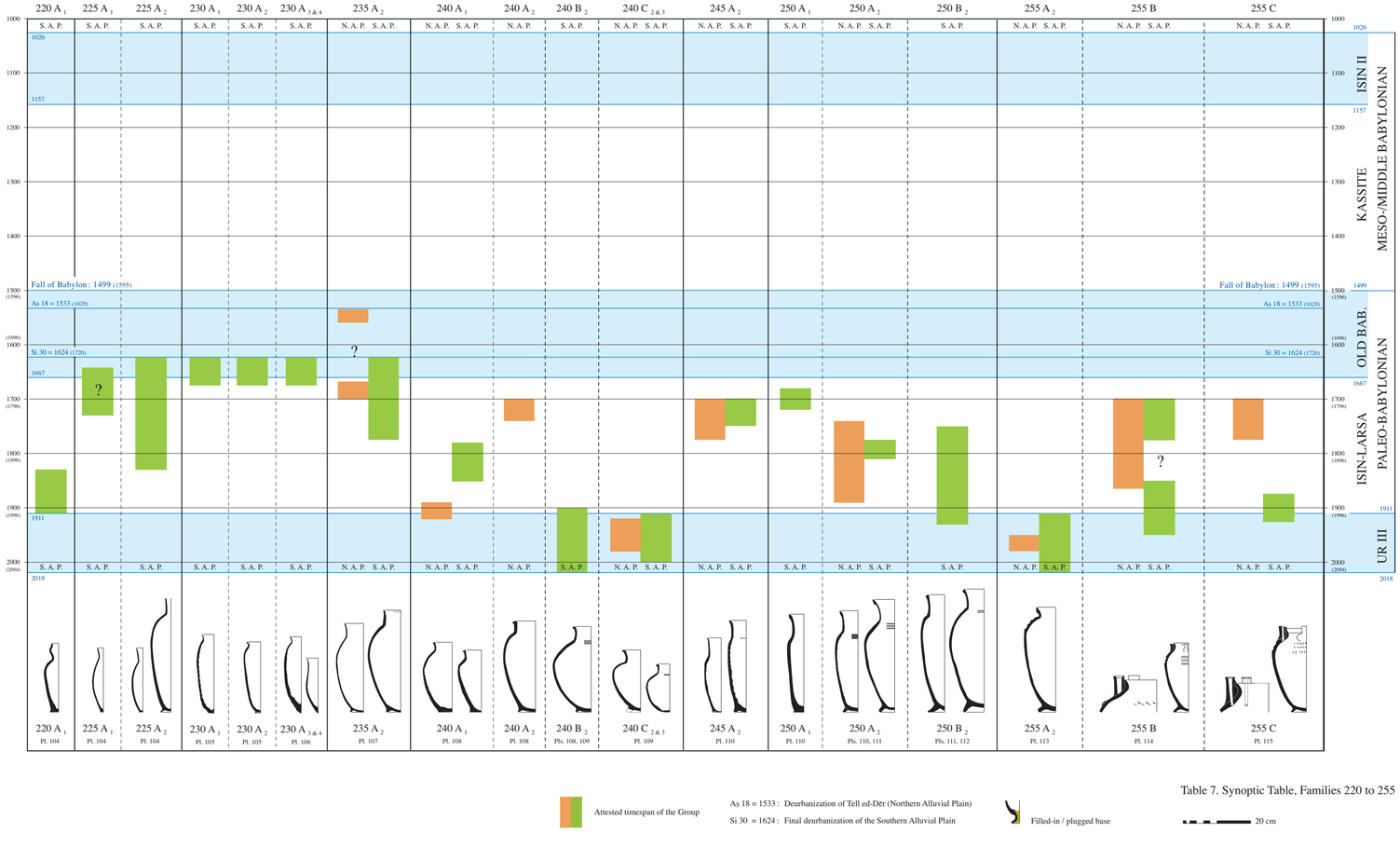


Attested timespan of the Group

As 18 = 1533 : Deurbanization of Tell ed-Dēr (Northern Alluvial Plain)

Si 30 = 1624 : Final deurbanization of the Southern Alluvial Plain

Filled-in / plugged base

20 cm

Table 7. Synoptic Table, Families 220 to 255

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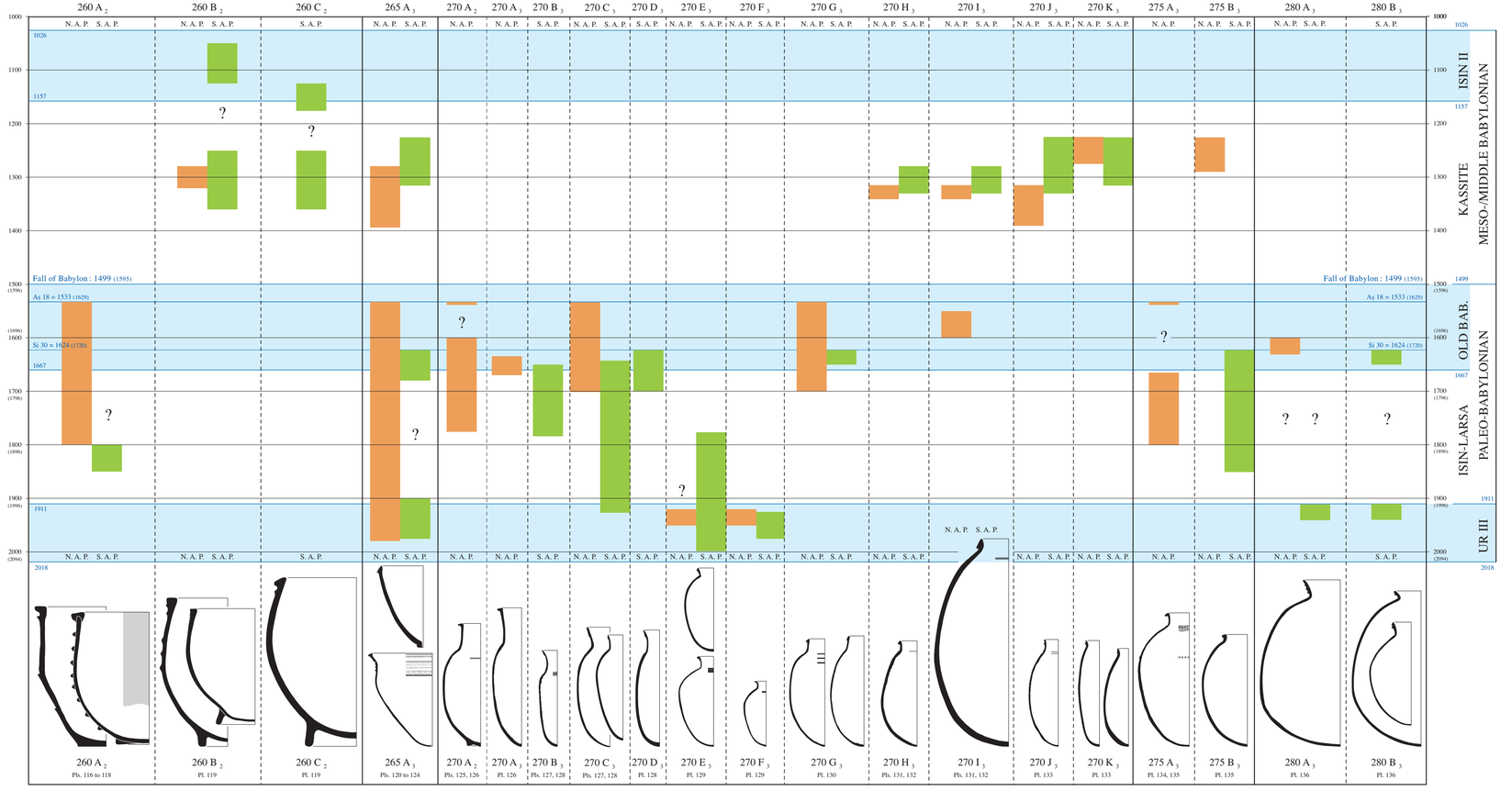


Attested timespan of the Group

As 18 = 1533 : Deurbanization of Tell ed-Dēr (Northern Alluvial Plain)

Si 30 = 1624 : Final deurbanization of the Southern Alluvial Plain

40 cm

Table 8. Synoptic Table, Families 260 to 280

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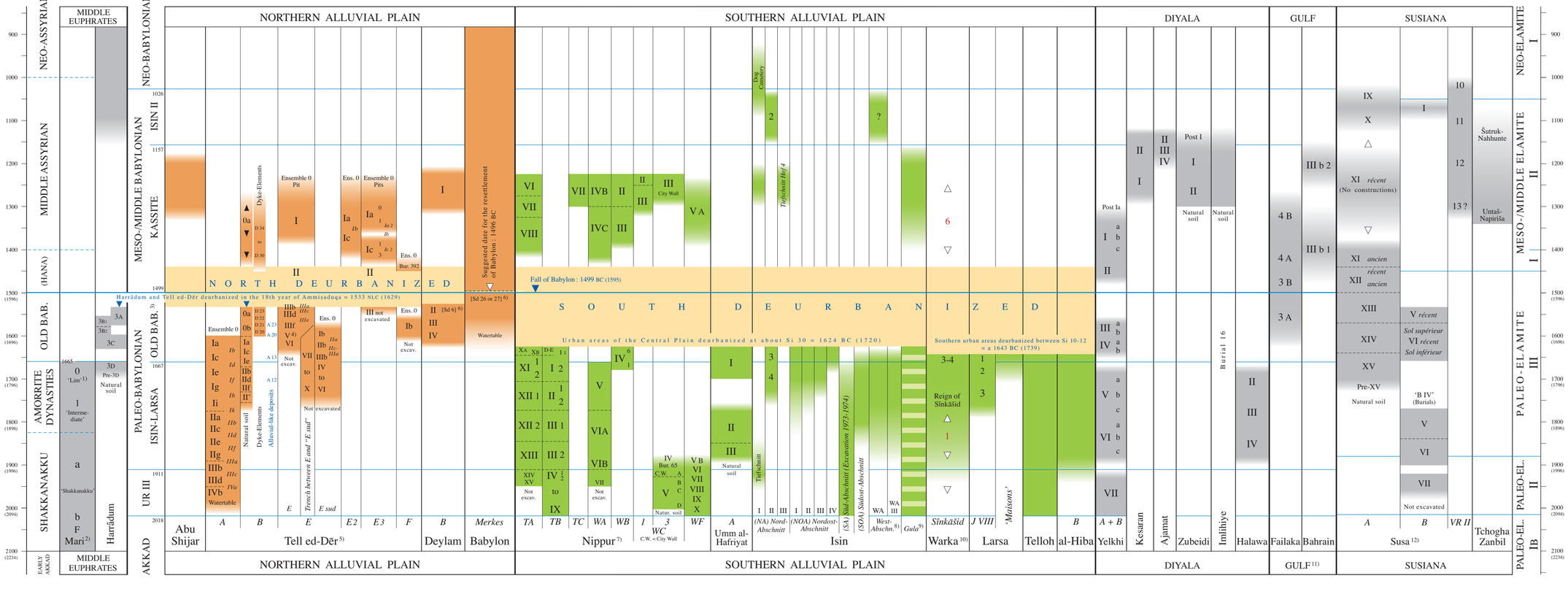


1) The "Bensim'alites" of DURAND 2008.

2) After PONS 2001, p. 42. Chantiers A and E are not included here. See Remarks on plates for chronological references.

3) In the Chicago tradition the Old Babylonian Period begins in the 30th year (year-name of year 31) of the reign of Hammurapi (= 1667 NLC).

4) For Ensemble IV, see now JANSSEN *et al.* 1994, 110-111, 122.

5) Ia, Ib etc. designate stratigraphic units. Designations in Roman letters represent occupation phases. Those in italics are fills, debris, etc.

6) [Sd 6], [Sd 26 or 27] : latest known OB text from the site.

7) Excavations in the Enlil Temple and Area WA 50c are not included here.

8) Season 1978 = WA. Season 1989 = WA III.

9) Remains of the 1st half of the 2nd mill. were discovered only on the facade and on the exterior entrance staircase.

10) Sînkâšid : Stratigraphische Einheiten 0, 2, 2a, 5, and 5a are regarded as being from uncertain contexts. Excavations in P, K, O, Q and Pb are not included here.

11) We only show the periods represented by pottery illustrated in this study. Adapted from HØJLUND 1987, fig. 707 (Failaka) and HØJLUND and ANDERSEN 1997, fig. 29 (Bahrain).

12) Chantiers A and B (Ghirshman), VR II (de Miroschedji) and periodization of Susiana : after STEVE *et al.* 2002/03,Table 2b. Excavations from which no pottery is reproduced in this work are not included here.

Table 9. Comparative Stratigraphy of Babylonian and Peripheral Sites

The dates given are those of the New Low Chronology (= NLC), cf. *MHEM* 4. Equivalent Middle Chronology dates are in parentheses. Adherents of the Middle Chronology will need to add about 100 years at the bottom of the period corresponding to the deurbanization of the Northern and Southern Alluvial Plains.

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ISBN 978-1-61491-018-3 (USA)

Library of Congress Catalog Card Number : 2014937351

ISBN 978-2-940032-18-1 (CH)